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#### **ABSTRACT**

Statistics are presented in chart and graph form on an estimated 26.5 million children under the age of 15 whose mothers were employed either part-time or full-time during the winter of 1984-85. How these children were cared for while their mothers worked, the complexity of these arrangements, the accompanying daily disruptions in the mother's work schedule, and the financial costs attributable to child care services are some of the topics examined. Appendices include an overview of the Survey of Income and Program Participation (SIPP) conducted, definitions, an explanation of the source and reliability of the estimates, a discussion of the quality of data collected, and a facsimile of the survey questionnaire. (Author/PCB)



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# WHO'S INDING



Child Care Arrangements: Winter 1984-85

Data from the Survey of Income and Program Participation



**US** Department of Commerce BUREAU OF THE CENSUS

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## Household Economic Studies

Series P-70, No. 9 Issued May 1987

# WHO'S MINDING THE KIDS?

Child Care Arrangements: Winter 1984-85

Data from the Survey of Income and Program Participation



U.S. Department of Commerce Malcolm Baldrige, Secretary Clarence J. Brown, Deputy Secretary Robert Ortner, Under Secretary for Economic Affairs

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## Who's Minding the Kids?

Child Care Arrangements: Winter 1984-85

#### INTRODUCTION

The child care statistics shown in this report cover an estimated 26.5 million children under the age of 15 whose mothers were employed in the labor force during the winter of 1984-85; 16 8 million of these children had mothers who were working full time. How these children were cared for while their mothers were at work, the complexity of these arrangements and the accompanying daily disruptions in the mother's work schedule, and the financial costs attributable to child care services are some of the topics presented in this report. This information was collected in a supplement to the Survey of Income and Program Participation (SIPP) and refers to the period December 1984 through March 1985.1 It is anticipated that subsequent supplements to this survey will be collected on a periodic basis in an effort to establish an ongoing data base of child care statistics that currently is lacking at the national level,2

Previous child care surveys conducted by the Census Bureau were limited to preschool-age children or to only the youngest child of working women in the household, while other surveys focused on child care arrangements used by school-age children after school hours, regardless of the employment status of the children's parents.3 Data on child care arrangements from SIPP include information for the three youngest children under age 15 of working women and refer to the usual weekly child care arrangements for their children. Thus, the data in this report present a more comprehensive view of child care services utilized by American families than presented in prior Census Bureau reports. Data from previous Current Population Surveys on child care will also be presented in this report in order to present an historical perspective on recent changes that have occurred in the way working women care for their children while at work.

The term "child care arrangements" used in this report describes how the children of working women are cared for during the time their mothers are at work. Child care arrangements include not only informal arrangements where neighbors, relatives, or family members look after the women's children either in the child's home or their own homes but also organized child care facilities such as day or group care centers or nursery schools or preschools. Also included are responses which indicate if women are able to take care of their own children while at work (either while working at home or outside their home) and if the children are left to care for themselves. Since school-age children are included in the survey, child care, in its broadest sense, also includes the time children are enrolled in kindergarten or grade school during the time their mothers are at work.

Some women may use more than one type of child care arrangement in the course of a typical work week, therefore, two categories of arrangements are shown in this report. primary and secoi dary. The primary child care arrangement refers to what the child was usually doing or the way the child was usually cared for diding most of the hours the child's mother was working. The secondary child care arrangement refers to which arrangement was used second most frequently while the child's mother was working. For example, if a schoolage child was in school most of the time his or her mother worked and then was left to care for himself or herself after school, the primary child care arrangement for this child would be "enrolled in grade school" and the secondary child care arrangement would be "child cares for seif"

No distinction was made in the survey as to the licensing status of the child care facilities or private homes where the children were cared for, nor of the specific educational content of any nursery or preschool. The respondent was left to determine how to categorize the child care arrangement she used for her children.

Wherever possible, comparisons are made between child care data from SIPP and from other sources in order to identify developing trends and to substantiate observed patterns in a newly emerging field of statistical indicators.

The principal findings of the survey are summarized below:

• Of the 8.2 million preschool age children (0 to 4 years old) of working women, 1.9 million (23 percent) were attending day care centers or preschools most of the time their mothers were at work. The remainder were primarily in supervised care in their own home (31 percent) or in

'The reference period for the SIPP child care module was for the month that preceded the interview month. The actual interviews were conducted in January 1985 through April 1985. As a result, the data presented in this report are an average of the usual child care arrangements used by women from December 1984 through March 1985. This period will be referred to as "winter 1984-85."

<sup>2</sup>An absence of a national data base on child care statistics has been previously noted by many researchers and governmental committees. See Select Committee on Children, Youth, and Families, U.S. House of Representatives, "Families and Child Care' Improving the Options" U.S. Government Printing Office Washington, D.C., September 1984, p. vii

<sup>3</sup>See Current Population Reports, Series P-23, No. 129. Child Care Arrangements of Working Mothers: June 1982: and Series P-23. No. 149. After School Care of School Age Children December 1984 for a discussion of these Census Bureau child care studies.

\*Population estimates from SIPP indicate that there were 29.3 million children under 15 years old with working mothers Information in this report is shown only for the three youngest children, representing about 90 cont of the children in this age group. Because of the relatively small sample size of this study, data are not generally shown by race and Hispanic origin



someone else's home (37 percent) or cared for by the mother herself while at work (8 percent).

- About 75 percent of the 18.3 million grade school age children (5 to 14 years old) were in school most of the hours their mothers were at work.
- The percentage of preschoolers cared for primarily by their fathers while their mothers worked was 19 percent for children of married women, compared with only 2 percent for the children of unmarried women (women widowed, divorced, separated, married with spouse absent, or never married). Unmarried women depended more on their children's grandparents for care in the child's home (16 percent) than did their married counterparts (3 percent).
- The use of day/group care centers or nursery/preschools among employed women 18 to 44 years old for their youngest child under 5 years increased from 16 percent in 1982 to 25 percent in 1984-85.
- Full-time working mothers with preschool-age children relied more heavily on child care arrangements outside the child's home than did mothers working part time. They also relied more heavily on organized child care facilities.
- Almost 7 million children under 15 years old of working mothers reported using a secondary child care arrangement; 32 percent of children 5 to 14 years old used a secondary arrangement, compared with only 13 percent of children under 5 years old.
- Of the 7.7 million women who depended on relatives, nonrelatives, or organized child care facilities for either primary or secondary child care arrangements, 5.9 percent reported losing time from work in the last month as a result of a failure in their arrangement.
- One million children of employed mothers during winter 1984-85 cared for themselves after school while their mothers were working.
- The median weekly child care expenditure for the 5.3 million women who reported paying for child care services during winter 1984-85 was \$38. Estimated annual child care expenditures made by working women for their children are about \$11 billion.<sup>5</sup>

#### POPULATION COVERAGE

The child care data presented in this report attempt to profile the arrangements typically used by women during their working hours. Data were obtained for the three youngest children under 15 years old (including any adopted or step-

'This figure is based on the aggregate weekly amount of cash expenditures (214 million dollars) reported by the estimated 5.3 million working women in the survey multiplied by 52 weeks, resulting in 11.1 billion dollars annually. If the responses of the estimated 188,000 men who reported paying cash for child care arrangements were included in this estimate, the annual child care expenditures paid by all parents would increase to 11.5 billion dollars.

children in their care) in the household. This represents approximately 90 percent of all children under 15 years old of working women in to sage group. All of these 26.5 million children were assigned a specific primary child care arrangement depending on how they spent most of their time while their mothers were at work. For analytical reasons, "going to school" or "child cares for self" were also considered at types of whild care arrangements since these activities describe how the child spent his time during the mother's working hours.

A majority of these children (16.8 million) had mothers who were employed at full-time jobs (35 hours or more per week). Even among the 8.2 million children under 5 years old of working women, a majority (5.1 million) had full-time working mothers. Table A also shows that 6.9 million children were also in need of another child care arrangement during their mother's work week, especially children of full-time workers. Thirty-three percent (5.6 million) of the children of full-time working mothers and 13 percent (1.3 million) of the children of part-time working mothers were provided with more than one type of child care arrangement during a typical week. The magnitude and anticipated growth of the number of children needing child care during their mothers' working hours implies that these issues will affect the lifestyles and daily schedules of most families with children in the future.

Table A. Children Under 15 of Employed Mothers, by Selected Characteristics Related to Child Care Arrangements

(Winter 1984-85 Numbers in thousands)

Subject	Children	Children	Children
	under 15	under5	5 to 14
All children	. 26,455	8,168	18,287
Mother employed full time	16,812	5,060	11,752
Mothers employed part time	9,643	3,108	6,535
Children using secondary care <sup>2</sup>	6,867	1,073	5,794
Mothers employed full time	5,575	726	4,850
Mothers employed part time	1,292	347	944

Data on child care arrangements were collected for the three youngest children of employed women. These children (26.5 million) represent 90 percent of all children of employed women (29.3 million) under 15 years old.

<sup>2</sup>Number of children who use more than one type of child care arrangement during the hours their mothers are at work. If a child is cared for after school by someone else or is left unsupervised, this constitutes use of a secondary arrangement

#### PRIMARY CHILD CARE ARRANGEMENTS

Table B shows the distribution of the primary child care arrangements provided for preschoolers (children under 5 years old) and grade-school-age children (5 to 14 years old) during winter 1984-85. Of the 18.3 million grade-school-age children of working mothers, about 75 percent (13.8 million children) were in either kindergarten or grade school most of the hours their mothers were at work, regardless of the mothers' marital status (table 1). This does not mean that the remaining 25 percent of these children were not enrolled in school; rather it implies that the majority of the hours that

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Table 3. Primary Child Care Arrangements for Children Under 15, by Age

Type of	Totai		Unaer 5 ye	ars	5 to 14 ye	ars
child care - arrangement -	Number	Percent	Number	Percent	Number	Percent
Number of children	26,455	100.0	8,168	100.0	18,287	100.0
Care in child's home	4,699	17.8	2,535	31.0	2,164	11.8
	2,496	9.4	1,282	15.7	1,214	66
	712	2.7	468	5.7	244	1.3
	804	3.0	306	3 7	498	27
	687	2 6	479	5.9	208	11
Care in another home By grandparent By other relative By nonrelative	3,801	14 4	3,019	37.0	782	4.3
	1,138	4.3	833	10.2	305	1.7
	467	1.8	367	4 5	100	0 5
	2,196	8.3	1,819	22.3	377	2.1
Organized child care facilities Day/group care center	2,411	9 1	1,888	23 1	523	2 8
	1,440	5.4	1,142	14 0	298	1.6
	971	3 7	746	9.1	225	1 2
Kindergarten/grade school	13,815	52 2	62	0.8	13,753	75 2
	488	1 8	-	-	488	2.7
	1,245	4.7	664	8 1	581	3.2

<sup>&#</sup>x27;Includes mothers working at home or away from home

the mothers worked did not necessarily coincide with their children's school day. (A subsequent section in this report will examine the child care arrangements provided for school-age children while not attending school.)

Of the remaining 4.5 million grade-school-age children not in school most of the time while their mothers worked, about 2.2 million were cared for in their own home, principally by their father, while another one-half million children were left unsupervised most of the time their mothers were at work

Child care arrangements for children under 5 years old. Working women with preschool age children use a wider variety of child care arrangements for their children than do working women with older children who spend most of their daytime hours in school. Thirty-one percent of preschoolers were cared for in their own homes, principally by the children's father, while 37 percent were cared for in another home, usually by someone not related to the child (table B) The use of organized child care facilities (23 percent) was substantial for the care of these younger children, and provided the primary child care services for approximately 1.9 million children under 5 years old. In addition, another 8 percent of these children were cared for by their mother while sho was working either at home or away from home, thus eliminating potentially costly commuting and child care expenses. The types of jobs these women held also affected their ability to care for their children while working, for example, 47 percent of the mothers of preschool-age children who cared for their child while working were either employed as private household workers or as child care workers.

Considerably different patterns of child care usage are noted among women according to their weekly work schedule. The hourly demands for child care services placed upon families with full-time working mothers cannot normally be met by other household members or relatives who have job and career

commitments requiring them to work full-time themselves. As a result, the location of child care activities for full-time working mothers tends to be outside of the child's nome and with nonrelatives rather than with family members or relatives in the child's home.

Preschoolers of full-time working mothers in winter 1984-85 were less likely to be cared for at home (24 percent) than were children of part-time working mothers (42 percent). Child care provided by the father was less frequently used by women who worked full time; 11 percent of the children of mothers who worked full time were cared for by their fathers compared with 24 percent of children of part-ti-ne working mothers. Parttime working mothers may have their work hours in the evenings or on weekends so "9 to 5" working fathers can babysit. In addition, 13 percent of the children of part-time workers were cared for by their mothers while at work, compared with only 5 percent of the children of women working full time (table 1). Offsetting this less frequent use of parental care by full-time working mothers was their greater reliance on child care in the home of someone unrelated to the child and on organized child care facilities.

Child care arrangements used by unmarried parents. The principal difference between the child care arrangements used by married women and unmarried women with preschool age children rests in the availability of the child's father to provide child care services. The percentage of preschoolers cared for by their father while their mother worked was 19 percent for children of married women but only 2 percent for the children of unmarried women (table 1). Despite the loss of the father as a potential child care provider, about 3 out of every 10 children of unmarried women were still cared for in the child's home, a proportion not different from that reported by married women. Unmarried women largely depended on their children's grandparents for child care services in the child's home, this arrangement accounted for 16 percent of all



primary child care used by unmarried mothers, compared with only 3 percent for children of married women.

Although the SIPP questionnaire on child care was designed primarily to collect data on the child care arrangements of working women, there were some men identified in the guestionnaire as the designated guardian of the child, even in the case of married-couple families. Table C shows the primary child care arrangements used by unmarried parents for their children under age 15 while at work. About 900,000 children under 15 years of age were cared for by unmarried men.7 Sixtyseven percent of these children spent most of their time in grade school during their father's working linurs, while 55 percent of the cnildren of unmarried women attended grade school while their mothers worked. Unmarried men tend to be guardians of older children. 85 percent of the children under age 15 of unmarried men were of achool age (5 to 14 years old), compared with 73 percent for unmarried women. About 78 percent of children 5 to 14 years old of unmarried working fathers were in school while their fathers were at work, a figure not different from the 76 percent reported for children of unmarried working mothers.

Child care arrangements for infants and preschoolers. The previous sections have indicated that the type of child care arrangements used by working parents varies considerably

In the case of married-couple families, interviewers were instructed to ask the child care questions of the wife. However, an estimated 578,000 married men were reported as the guardians of children, perhaps reflecting a step-mother/step-child situation where the husband was thought to be the appropriate reference person. In some instances, married men may be the legal guardians of children who are living with them, even though they are not the natural fathers of the children (e.g., grandfathers or uncles).

'SIPP estimates for unmarried men appear to be substantiated by other survey results. Data collected in the March 1985 Current Population Survey indicated that there were 671,000 child en under age 12 and 528,000 children 12 to 17 years old living with unmarried fathers who were employed at the survey date (Current Population Reports, Series P-20, No. 410. Marital Status and Living Arrangements. March 1985, table 9)

by the age of the child. Estimates from the June 1985 Current Population Survey (CPS) show that almost one-half of all women 18 to 44 years old who had a birth in the 12-month period preceding the survey were in the labor force either looking for work or on layoff (0.3 million) or currently employed (1.4 million) at the time of the survey. Problems in finding child care arrangements for young children are often encountered by working adults since organized child care facilities usually exclude the admission of infants and very young children.

Table D presents the primary child care arrangements used by women with preschoolers by the age of the child as collected in the SIPP child care module. SIPP data, similar to estimates derived from the June 1985 CPS, indicate that about 1.4 million children under ', year of age in winter 1984-85 required child care services while their mothers were at work. Seventy-eight percent of infants were cared for in either the child's home or in another home. Another 14 percent were cared for in organized child care facilities, a substantial increase over the 5 percent estimated for infants from the June 1982 CPS.<sup>10</sup>

Among 3-and 4-year-olds child care in the child's home and in another home accounted for only 58 percent of all arrangements while organized child care facilities and kindergarten enrollment made up 34 percent of the primary care for these older children. It is apparent that for the first few years of a child's life, the children of working women may experience considerable changes in the type of child care as the children grow from infancy to school age.

Work disruptions caused by failures in child care arrangements. Some of the principal factors which affect a family's choice of child care arrangements include the quality and costs

Table C. Primary Child Care Arrangements Used by Unmarried Parents for Their Children Under 15, by Sex

Type of child care	Total		Female		Male		
arrangement	Number	Percent	Number	Percent	Number	Percent	
Number of children .	6,522	100.0	5,616	100 0	906	100.0	
Care in child's home By father By grandparent By other relative By nonrelative	950	14.6	806	14.4	144	15 9	
	74	1 1	52	0 9	22	2.4	
	379	5.8	321	5.7	58	6.4	
	273	5 7	341	6.1	32	3.5	
	24	1.9	92	1.6	32	3.5	
Care in another home By grandparent By other relative By nonrelative	955	14 6	872	155	83	9.2	
	307	4 7	253	45	54	6.0	
	139	2 1	139	25	0	0.0	
	509	7.8	480	8,5	29	3.2	
Organized child care facilities	. 592	9.1	539	9 6	53	5.8	
Day/group care center	408	6.3	371	6 6	37	4.1	
Nursery school/preschool	. 184	2.8	168	3.0	16	1.8	
Kindergarten/grade school .	3,701	56 7	3,095	55 1	606	66.9	
Child cares for self	. 168	2.6	156	2.8	12	1.3	
Parent cares for child¹	160	2.5	149	2 7	11	1.2	

Includes mothers working at home or away from home.



<sup>\*</sup>Current Population Reports, Series P-20, No. 406, Fertility of American Women: Juna 1985, table 4.

Select Committee on Children. Youth, and Families, op cit., p 13. Current Population Reports, Series P-23, No 129, op cit., table 2

Table D. Primary Child Care Arrangements Used by Employed Mothers for Their Children Under 5, by Age

					Age of c	hild		
Type of	Total		Under 1	year	1 and 2 y	/ears	3 and 4 years	
child care arrangement	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Number of children	8,168	100 0	1,385	100 0	3,267	100.0	3,516	100.0
Care in child's home By father By grandparent By other relative By nonrelative	2,534 1,282 467 306 479	31.0 15.7 5.7 3.7 5.9	516 252 102 44 118	37.3 18 2 7 4 3.2 8.5	1,058 528 208 147 185	32.7 16 2 6.4 4.5 5.7	950 502 157 115 176	27.0 14.3 4.5 3.3 5.0
Care in another home	3,020 833 368 1,819	37.0 10.2 4.5 22 3	563 174 70 319	40.6 12.6 5.1 23.0	1,368 361 130 877	41 9 11.0 4.0 26.8	1,089 298 167 624	31.0 8.5 4.7 17.7
Organized child care facilities Day/group care center Nursery school/preschool	1,888 1,142 746	23.1 14 0 9.1	195 116 79	14 1 8.4 5 7	563 401 162	17.2 12.3 5.0	1,131 625 506	32.2 17.8 14 4
Kindergarten/grade school Parent cares for child <sup>1</sup>	61 663	0.7 8.1	112	8.1	267	8.2	61 285	1.7 8.1

<sup>&#</sup>x27;Includes mothers working at home or away from home.

of the arrangement, proximity to work, and confidence in the ability and availability of the child care provider during the mothers' working hours. The last factor is of primary concern to the employer since it directly affects the rates of absenteeism and tardiness resulting from a failure in a child care arrangement.

For the first time in a Census Bureau survey, an attempt was made to estimate the incidence of child care-related disruptions in the daily work schedule among women. Working women were asked if any time was lost during the reference month by either the women themselves or their husbands because the person who usually cared for the child (or children) was not available. (It should be noted that the estimates of time lost reflect work disruptions experienced during the more inclement winter months, similar questions asked during the spring or surfacer months, for example, may yield different estimates of wo "c disruptions.)"

The question was asked of women if any of their three youngest children under 15 years old were cared for by a grandparent or other relative (excluding their child's parents or siblings), or a nonrelative, or if the child was attending a day/group care center or nursery/preschool. Excluded were women who only used kindergartens or grade school or if the child cared for himself. Of the 7.7 million women in this specified group, 5.9 percent reported losing some time from work in the last month as a result of a failure in a child care arrangement.

"Data from the Nay 1985 Current Population Survey indicate that among women with children under 18 years old who were employed as full time wage and salary workers, about 4 6 percent were absent from their jobs for reasons other than illness or injury (Bruce W. Klein, "Missed Work and Lost Hours, May 1985," Monthly Labor Review, Vol. 109, No. 11, November , pp. 26-30)

Estimates of child care related work disruptions for women who have only one child and who use only one type of child care arrangement while at vark are shown in table E. Work disruptions resulting from failures in child care arrangements affected 5.5 percent of these 2.6 million working women. Mosfur the percentages in table E are based on sample sizes too small to ascertain statistically significant differences in work disruptions among the different population groups

Yable E. Employed Mothers Losing Time from Work
During the Last Month Because of Failures in
Child Care Arrangements

(Winter 1984-85, Numbers in thousands, Limited to women with only one child under age 15 using only one type of child care)

Characteristic	Number	Percent
Number of women	2,602	5.5
Marital status: Married, husband present All other marital statuses!	1,762 840	6.0 4 4
Employment status: Full time	1,907 695	5.4 5.7
Age of child Less than 5 years old 5 years old and over	2,185 418	6 1 2.4
Place of primary care: In child's home	443 1,256 903 605 298	5.4 7.8 2.3 1.4 4 3

<sup>&#</sup>x27;Includes married, husband absent (including separated), widowed, divorced, and never married

shown in the table. However, women who use day/group care centers experience a smaller incidence of work disruptions (1.4 percent) than do women who place their children in someone eise's home while at work (7.8 percent). Child care in someone else's home may be more susceptible to personal emergencies or weather-related disruptions that result in higher rates of failures in child care arrangements than when using organized child care facilities where more starf are available on a daily basis.

## CHANGES IN CHILD CARE ARRANGEMENTS: JUNE 1982 AND WINTER 1984-85

As previously noted, SIPP child care data were collected for an expanded age group of children and for more children in a household than in previous Census Bureau child care surveys. The more encompassing SIPP data base offers the opportunity to draw comparisons with prior child care surveys for selected groups of women.

Earlier Census Bureau Current Population Surveys conducted in June 1977 and June 1982 gathered information about the child care arrangements used by employed women 18 to 44 years old for their youngest child under 5 years old. Data from these streeys indicated that the only significant change in the utilization of child care services that occurred between 1977 and 1982 was an increase in the percentage of women using organized child care facilities for their children from 13 percent in 1977 to 16 percent in 1982.12

Similarly, between June 1982 and winter 1984-85, another increase was noted in the use of day/group care centers or nursery schools or preschools (table 3). In 1984-85, 25 percent of the 6 7 million working women who had a child under 5 used some type of organized child care facility for their youngest child most of the time while they in the at work, compared with 16 percent in 1982 (figure 1). Fifteen percent of children under 5 years old were in day or group care centers in 1984-85, up from 10 percent in 1982. In addition, 10 percent of the children under 5 years old were enrolled in nursery or preschools in 1984-85, compared with only 6 percent in 1982. (Comparisons between 1982 and 1984-85 are not adjusted for possible seasonality in types of child care arrangements throughout the vear.)

The increased utilization or organized child care facilities among working women should be viewed in a broader context of increasing errollment among preschool age children since the 1970's, both among working women and those not in the labor force. 14 Enrollment of children in programs pro-

viding educational enrichment appears to be growing among women, regardless of their labor force status. The consensus among researchers is that structured preschool programs are beneficial for a child's educational and social development, particularly in the case o. children from economically disadvantaged households.<sup>15</sup>

#### ORGANIZED CHILD CARE FACILITIES

Day and group care services and nursery/preschool based arrangements constitute the organized child cale arrangements used by employed women with children under 5 years old (table 1). In winter 1984-85, 14 percent (1,142,000) of children under 5 years old of employed women were in day arid group care centers while another 9 percent (746,000) were enrolled in nursery or preschool programs. The majorant of these young children were 3 and 4 years old (table D), use of day/group care arrangements was higher among women employed full-time (17 percent) than among women employed part-time (10 percent) as was nursery/preschool usage (12 and 5 percent, respectively). About one-quarter of the primary child care provided for the children of part-time working women was by the child's father which partly accounts for the low usage of day and group services among these women.

In addition to the mother's employment status, the age of the child is another important factor related to the use of organized child care facilities as the primary child care arrangement. The percent distribution of primary care arrangements used by the women for their children under 5 years by the child's age are shown in figure 2. The use of day/group care centers increased from 8 percent for children under one year to 18 percent for children 3 and 4 years old. The increase in labor force participation among women with infants (from 44 percent in 1982 to 48 percent in 1985) is paralleled by a corresponding rise in the use of day care centers for infants from 3.6 percent in June 1982 <sup>16</sup> to 8.4 percent in 1984-85. These figures suggest that an increasing propo. In of women with infants are using day care centers as a primary child care arrangement to enable them to participate in the labor force.

In addition to the child's age, other social and demographic factors of the child's mother appear to be related to the use of organized child care facilities as the primary child care arrangement. Figure 3 shows that better educated mothers make greater use of organized child care facilities for their preschool-age children. Thirty-one percent of the children of employed mothers who completed 4 or more years of college used either day/group care centers or nursery/preschools in winter 1984-85 as their primary child care arrangement, compared with 15 percent for the children of employed mothers who did not complete high school.

Very low usage of organized group care facilities for preschoolers is noted for women employed in service occupations (11 percent), compared with usage of these arrangements by women in either managerial or professional occupations (30 percent). Women in service occupations tend

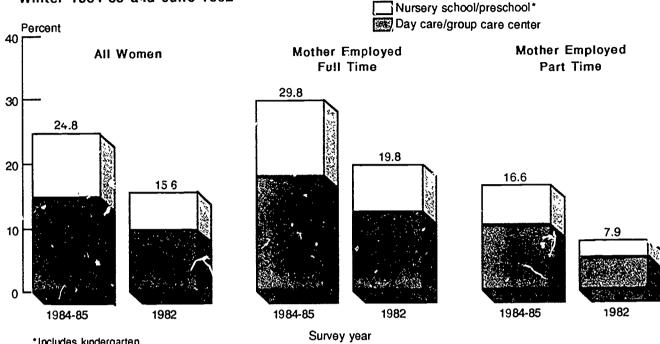
<sup>12</sup>In t'ils section of the report, kindergarten enrollment is included in the nursery school/preschool category in order to make comparable estimates with the 1977 and 1982 CPS data sets Data for 1977 and 1982 (excliding reports of "don't know/no answer") were derived from table A in Current Population Reports. Series P-21, No. 129, op. cit. Percentages were sujusted after the removal of don't how/no answer response

<sup>13</sup>Differences in child care arrangements between 1922 and 1984-85 may partly result from seasonal variation in the availability of child care facilities. It is possible that more child care centers or school based centers are open in the winter months than in June. No attempt has been made to estimate any seasonal variation in child care arrangements.

<sup>14</sup>For nursery school enrollment trends from 1972 to 1982, see Current Population Reports, Series P 20, No 408, School Enrollment-Social nomic Characteristics of Students October 1982, p. 1.

<sup>&</sup>lt;sup>13</sup>Select Committee on Children, Youth, and Families, op cit, p 20. <sup>16</sup>Current Population Reports, Series P-23, No 129, op cit, table 2.



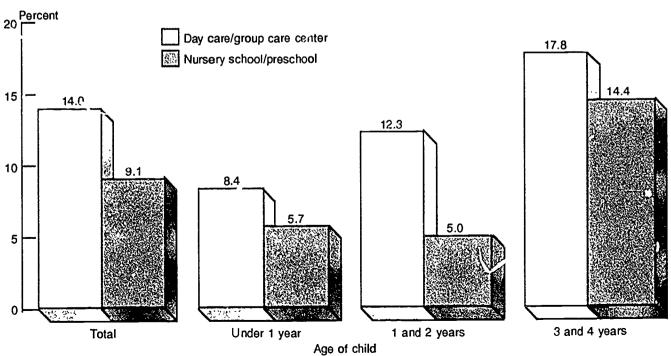


\*Includes kindergarten. Source: table 3.

Note: 1984-85 data are from SIPP; 1982 data are from CPS.

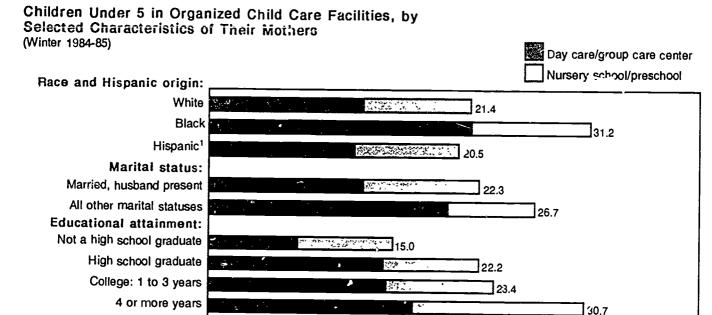
Figure 2.

Children Under 5 in Organized
Child Care Facilities
(Winter 1984-85)



Source: table D

Figure 3.



10.5

10

15.6

20

Percent

<sup>1</sup> Hispanics may be of any race. Source: table 4B

to depend more heavily on parental child care, either by the women themselves or their spouses, than do women in managerial or professional occupations (table 4B). Data from the May 1985 Current Population Survey indicate that women who are service workers are more likely to work non-day shifts (31 percent) than women in professional specialty (10 percent) or managerial (7 percent) occupations. Thus, they may be more able to use their husbands as child care providers in the evenings while at work 17 They may also be less likely to use organized child care facilities, such as day care centers and nursery schools, which typically operate during the daytime hours rather than at night. In addition, the lower annual earnings of women in service occupations may affect their ability to pay for organized child care services. For example, the mean annual earnings of women in service occupations in 1979 were \$5,129, much lower than the earnings of women in managerial occupation (\$12,145) or professional occupations (\$11,199).18

Occupation:

Service workers

laborers

0

Managerial-professional

Operators, fabricators, and

Technical, sales, adm. support

The use of auy/group care centers by the preschool-age children of Black women (21 percent) is significantly higher

than that for children of either White women or Hispanic women (13 and 12 percent, respectively). Data in table 4B show that children of married women were also less likely to be in day/group care centers (13 percent) than were children of unmarried women (20 percent). The high use of day care centers and low percentage of care provided by father at home among Black children is associated with the mother's marital status. Only 46 percent of the Black women with children under 15 years were married and living with their husbands, compared with 81 percent for White women. Thus, a high percentage of Black women may be compelled to depend on day/group care centers for child care to compensate for the absence of the child's father in the household.

30.4

40

27.5

30

#### SECONDARY CHILD CARE ARRANGEMENTS

One of the principal issues discussed at recent hearings conducted by the Select Committee on Children, and Youth, and Families, U.S. House of Representatives, concerned the lack of data on child care arrangements of school-aged children <sup>20</sup>. Unlike the two earlier child care surveys conducted

<sup>&</sup>lt;sup>17</sup>U.S. Department of Labor, Bureau of Labor Statistics, unpublished tabulations from the May 1985 Current Population Survey

<sup>&</sup>lt;sup>18</sup>U.S. Bureau of the Census, 1980 Census of Population, Volume 2, 30-2-8B, Subject Reports, Earnings by Occupation and Education.

<sup>19</sup>No significant difference is found between White women and Hispanic women in pay/group care utilization

<sup>&</sup>lt;sup>20</sup>Select Committee on Children, Youth, and Families, op. cit., p. 27

by the Census Bureau in 1977 and 1982, the present SIPP study covers the after school arrangements of the children of working mothers. The number and percentage of children using secondary child care arrangements are presented in table 7. (As defined earlier, the secondary child care arrangement refers to the arrangement used second most frequently during a typical work week.)

Almost 7 million children (25 percent of all children under 15) of working mothers use a secondary child care arrangement. Secondary child care arrangements are used by 32 percent of school-age children 5 to 14 years old but by only 13 percent of children under 5 years. The usage of secondary child care arrangements by school-age children of mothers employed full time is about three times (41 percent) that of children whose mothers are employed part-time (14 percent). It is possible that many women who work part time do so to the extent that they can return from work in time to care for their children after school.

The types of secondary child care arrangements used by older children who are in school most of the time their mothers are at work are shown in table F and figure 4. The most frequently mentioned secondary care arrangement provided for older children whose mothers are employed full-time is care in the child's own home (42 percent). Another 24 percent are

cared for in someone else's home, v.hile about 321,000 children (7 percent) attend day group care centers after school.

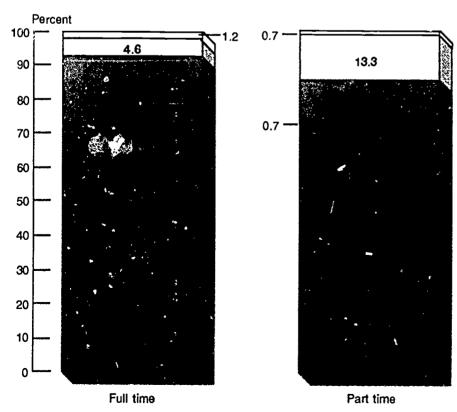
Aitogether, 1 million children of employed mothers (including those working part time) cared for themselves after school while their mothers were working.<sup>21</sup> Data on child care arrangements used by women with school-age children are probably different during the summer months when school is out and parents are forced to seek alternative arrangements during daytime lours while they are at work.

#### COST OF CHILD CARE ARRANGEMENTS

Weekly expenses for child care were collected in SIPP for all of the women's children under 15 years of age living in the household. The question was asked of women if any of

Figure 4.

Secondary Care Arrangements of Grade School Children, by Employment Status of Mother
(Winter 1984-85)







Source: table F

<sup>&</sup>lt;sup>21</sup>A recent estimate from the December 1984 Current Population Survey placed the number of children 5 to 13 years old of full-time working mothers who were left unsupervised after school hours at 1.4 million (See Current Population Reports, Series P-23, No. 149, op cit.) Data showin table F, indicate only the secondary arrangements used by children who are in school most of the time their mothers are at work. Table 7 shows that 354,000 5-to-14-year-old children of full-time working mothers and 134,000 5-to-14-year-old children of part-time working mothers were in their own care while the mother worked as the primary type of child care arrangement. Undoubtedly, most of these children also went to school but may not have been in school most of the time while their mothers were at work (eg., the mother worked in the evenings or on weekends)

Table F. Secondary Child Care Arrangements for Children 5 to 14 Who are in School Most of the Time While Their Mothers are at Work

Type of	Total		Employed ful	Employed part time		
child care arrangement	Number	Percent	Number	Percent	Number	Percent
Number of children	5,037	100.0	4,320	100.0	716	100.0
Care in child's home	2,094 809 264 832 189	41.6 16 1 5 2 16.5 3.8	1,797 664 235 748 150	41.6 15.4 5.4 17.3 3.5	296 145 28 84 39	41.3 20.3 3.9 11.7 5.4
Care in another home By grandparent By other relative By nonrelative	1,258 404 209 645	25.0 8.0 4.1 12.8	1,033 338 155 540	23.9 7.8 3.6 12.5	227 66 55 106	31.7 9.2 7.7
Organized child care facilities Day/group care center Nursery school/preschool	344 327 17	6 8 6.5 0 3	334 321 13	7 7 7.4 0 3	9 5 4	14 8 1.3 0.7 0 6
Kindergarten/grade school Child cares for self	38 1,006 294	0.8 20 0 5.8	38 918 199	0.9 21 3 4.6	0 88 95	0.0 12 3 13 3

<sup>&#</sup>x27;Includes mothers working at home or away from home.

their three youngest children under age 15 were cared for by a grandparent or other relative, a nonrelative, or if any children were placed in day/group care centers or in a nursery/preschool Excluded were women who used only family members (i.e., the child's father or siblings) or used only kindergartens/grade schools or if the child cared for himself or herself. Therefore, cash transfers to family members or payments for schooling were not included in child care costs. Of the 7.7 million women in this specified group, 69 percent (5 3 million) responded that some cash payment was made for receiving child care services for at least one of their children (table 8).

Seventy-two percent of mothers employed full time paid for child care services, compared with 60 percent of mothers employed part time. Payments for child care were also made more frequently by married women than by unmarried women (72 and 61 percent, respectively). Among women whose youngest child was under 5 years old, 72 percent paid for child care services; data from the June 1982 CPS also showed that 77 percent made some cash payment for their youngest child under 5 years old.<sup>22</sup> Altogether, for the 5.3 million women paying cash for child care services the median child care expenditure was \$38 per week. Twenty-nine percent of these women paid \$50 or more per week for their child care arrangements.

Because of analytical complexities in properly attributing child care costs to specific types of arrangements (see discus sion in appendix D), the child care expenditures shown in table G are limited to women with only one child who also used only one type of child care arrangement. The median child care expenditures paid by this group of women was \$39 per week. Twenty-seven percent of these women paid more than \$50 per week per child for child care arrangements. The

cost of child care is less expensive when provided by relatives than by nonrelatives or organized child care facilities. Only 1 in 10 women paid over \$50 per week for care by relatives, compared with 1 in 3 for child care services provided by nonrelatives or by organized child care facilities. Other estimates suggest that child care costs average \$45 to \$75 per week for preschoolers and over \$100 per week for care in day care centers or for housekeepers performing child care duties in the child's home.<sup>23</sup>

The Federal Government currently approves child care costs as work related expenses fc. dependent children under 15 years old when both spouses work full time or when one spouse works full-time and the other works part time or is a student. Divorced or separated parents who have custody of children and single parents may also claim a tax credit for these expenses. Tax laws permit between 20 and 30 percent of annual child care expenditures (on a base of up to \$2,400 for the first child and \$4,800 for two or more children) to be used as a tax credit. For the ta. year 1984, 2.6 billion dollars of tax credits were filed on 7.5 million individual income tax returns.<sup>24</sup>

Data from SIPP for winter 1984-85 show that 5.3 million women who were employed at this time and who had at least one child under 15 years old paid cash for child care arrangements (table 8). This estimate is smaller than the preceding IRS estimate of 7.5 million for several reasons, principally because the SIPP estimate in this table includes only women who were working during the survey reference period. The IRS estimate, however, is based on claims by

<sup>&</sup>lt;sup>23</sup>Select Committee on Children, Youth, and Families, op cit., pp 17-18, and Martin O'Connell and David E Bloom, 'Juggling Jobs and Babies America's Child Care Challenge," Population Trends and Public Policy, No 12 (Washington, D.C., Population Reference Bureau, 1987).

<sup>&</sup>lt;sup>24</sup>Internal Revenue Service, "Individual Income Tax Returns 1984," Statistics of the Income Division of the Internal Revenue Service, Publication No. 1304 (Revision of November 1986), tables 1.3 and 1.4

<sup>&</sup>quot;Current Population Reports, Series P-23, No. 129, op. cit., table 5.

Table G. Percent Distribution of Weekly Cash Payments Made by Employed Mothers With One Child, by Selected Characteristics

(Numbers in thousands. Limited to mothers using only one child care arrangement)

							Pay	ing cast	1				
Characteristic	Total	Not paying cash	Number	Total	Under \$10	\$10 to \$19	\$20 to \$29	\$30 to \$39	\$40 to \$49	\$E0 to \$59	\$60 to \$69	\$70 and over	Median (dollars)
Number of women	2,602	893	1,709	100.0	3 2	5 9	20.7	21.7	21.3	15.5	5 9	5.8	39.3
Type of arrangement													
Care by relatives	943	580	363	100.0	49	10 6	41.0	23.5	10.3	6.1	2 5	1.2	28.4
Care by nonrelatives	757	99	658	100.0	2.8	5.9	18 7	20 5	19.0	17.2	67	9.2	41.1
Organized child care facilities	903	215	688	100.0	2 7	3.4	11.9	22.0	29.5	18.9	6.9	4.8	43.5
Age of child:													
Less than 1 year old	475	212	263	100.0	2.9	10.4	13.7	21.2	16 4	15 5	3.4	16.5	41.1
1 and 2 years old	970	304	666	100.0	2.8	4 1	27.2	19.1	18.0	14.2	9.1	5.5	38.4
3 and 4 years old	739	189	550	100 0	5.1	5.3	15 9	25 4	24.5	17.1	3 8	2.9	39.4
5 and 14 years old	417	188	229	100 0	-	7 4	21.4	21 1	29.3	15 5	4.2	1.0	40.1
Employment status													
Full time	1,908	565	1,343	100 0	0.9	24	16.7	23.2	24.8	19.0	7 1	60	42 7
Part time .	695	329	366	100 0	11 5	18.8	35.5	16 2	8.8	2.9	1 3	5.1	25.5
Marital status:													
Married husband present	1,762	541	1,221	100 0	3 5	4.5	20.4	20 4	20.9	17.6	6.3	6.3	40.6
All other martital statuses'	841	353	488	100.0	2.3	9 5	21.4	25 0	22 4	10 3	4.7	4.3	36.8

'Includes married, husband absent (including separated), widowed, divorced, and never married women Note. M .dian cash payments derived from more detailed distribution of dollar amounts

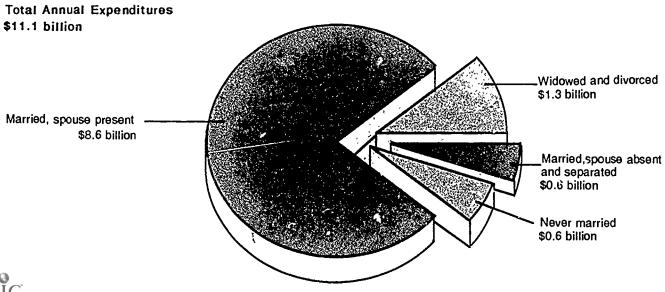
parents with dependent children who may have worked at any time during the calendar year. (The SIPP data in table 8 also exclude men with dependent children and unemployed women who were students and paid cash for child care arrangements)

If the weekly estimates of child care expenditures derived from SIPP for winter 1984-85 were assumed to be representative of costs over the entire year, child care arrangements

made by working women over the course of a year could exceed 11 billion dollars (figure 5). The actual child care expenditures made by families may differ from this estimate because of seasonality in employment conditions, variations in the number of hours worked per week, and changes in child care arrangements used by women during the year (especially when schools are closed).

Figure 5.

Amount Spent Annually on Child Care Arrangements, by Marital Status of Working Women



A recent Supreme Court decision in California Federal Savings and Loan Association v. Guerra, has upheld a California law requiring employers to grant up to four months leave to women medically disabled by pregnancy or childbirth. This ruling, by preserving job retention, may encourage women to return to work shortly after childbirth knowing that a job is still waiting for them without any penalty for taking a leave of absence. This may potentially increase the demand for child care services for women with infants, thus making child care costs a more integral component of the family budget in the future.

#### **NOTE ON ESTIMATES**

Estimates of primary and secondary child care arrangements shown in this report are based on respondents'

answers to the question of what their child was usually doing during the time that they were at work. The estimates of the number of children being left unsupervised by an adult during this period may be underestimated by those respondents who perceive that leaving the child unattended while at work may be interpleted as a socially undesirable response. In some cases, parents—out of concern for their child's safety—may be unwilling to reveal their child's whereabouts when asked about this subject. The misreporting of any specific child care arrangement may affect the overall distribution of child care arrangements shown in this report. In all cases, the interviewer accepted the response.



Table 1. Primary Child Care Arrangements of Children Under 15. by Marital and Employment Status of Their Mothers

Montal atom, of		All mothers children		Moth	ers with chil 5 years		Mot	thers with ch 5 to 14 yea	
Marital status of mother and type of child care arrangement	Total	Employed full time	Employed part time	Total	Employed full time	Employed part time	Total	Emploved full time	Employed part time
All Marital Statuses									
Number of children Percent	26,455 100.0	16,812 100.0	9,643 100.0	8,168 100.0	5,060 100.0	3,108 100.0	18,287 100.0	11,752 100 0	6,535 100.0
Care in child's home By father By grandparent By other relative By nonrelative	17 8 9.4 2.7 3.0 2 6	14.8 6 7 2.5 3.2 2.3	23.0 14.1 3.0 2.7 3.1	31.0 15.7 5.7 3.7 5 9	10.7 5 1 3.6 5 0	41.8 23.8 6.7 4.0 7.3	11.8 6.6 1.3 2 7 1.1	10.6 5.0 1.4 3.0 1.1	14.1 9 5 1.2 2.2 1.1
Care in another home By grandparent By other relative By nonrelative	14.4 4.3 1.8 8.3	15.9 4 4 1.7 9.8	11.7 4.1 1.9 5.7	37.0 10.2 4.5 22.3	42.2 10.5 4 2 27.5	28.4 9.7 5.0 13.8	4.3 1.7 0 5 2.1	4.6 1.8 0.6 2.2	3.7 1.5 0.4 1 8
Organized child care facilities Day/group care center Nursery school/preschool.	9.1 5 4 3.7	10.8 6.3 4.5	6.1 3.9 2.2	23.1 14 0 9 1	28.0 16.5 11.5	15.2 9 9 5.3	2.8 1.6 1.2	3.6 2.0 1.6	1.6 1.0 0 6
Kindergarten/grade school Child cares for self Parent cares for child	52.2 1 8 4.7	53.4 2.1 3.0	50.2 1.4 7.8	0 8 8.1	0 4 5 0	1.3 13 3	75 2 2.7 3 2	76.2 3.0 2.1	73 4 2.1 5.1
Married, Husband Present									
Number of children Percent	20,839 100.0	12,475 100.0	8,364 100.0	6,637 100.0	4,051 100.0	2,586 100.0	14,202 100.0	8,424 100.0	5,778 100.0
Care in child's home  By father  By grandparent  By other relative  By nonrelative	18.7 11.7 1.9 2.2 2.9	15.8 9.0 2.0 2.3 2.5	22.9 15.8 1.6 2.1 3.4	31.3 18.8 3.3 2.6 6.5	24.7 13.1 3.7 2.4 5.5	41.6 27.8 2 7 2.9 8.2	12.8 8.4 1.2 2.0 1.1	11.6 7.0 1 2 2.3	14.6 10.3 1.2 1.7 1.2
Care in another home By grandparent By other relative By nonrelative	14.1 4.2 1.6 8 2	16.7 4.7 1.7 10.3	10.2 3.6 1.4 5.2	36.5 10.6 4.1 21.8	42.8 11.4 4.3 27.1	26.5 9.5 3.7 13.4	3.6 1.3 0.4 1 9	4 1 1.5 0.5 2.1	2.8 0.9 0.4 1.6
Organized child care facilities Day/group care center Nursery school/preschool .	9.0 5.1 3.9	11.2 6.4 4 8	5.6 3.2 2 4	22.3 12 7 9.6	27.1 15.3 11.8	14.7 8 6 6.1	2.8 1.6 1 2	3.6 2 1 1.5	1 5 0.8 0.7
Kindergarten/grade school Child cares for self Parent cares for child!	51 4 1.6 5 3	51.3 1.9 3 1	51 7 1.1 8.5	0.8 9.2	0 4 5 0	1 4 15 8	75 1 2 3 3.4	75.8 2 8 2 2	74.1 1.7 5.3
All Other Marital Statuses <sup>2</sup>									
Number of children Percent	5,616 100.0	4,337 100.0	1,279 100 0	1,531 100.0	1,009 100.0	522 100 0	4,085 100.0	3,328 100.0	757 100.0
Care in child's home By father By grandparent By other relative By nonrelative .	14.4 0 9 5.7 6 1 1.6	11.6 0.3 3.9 5.8 1 7	23 5 3 0 12 0 7.1 1.4	30.0 2.2 16.2 8.6 2.9	23.2 1 3 10.7 8 3 2 9	43.1 4 0 26.8 9.2 3 1	8 5 0 4 1.8 5 1 1 2	8 1 1 8 5.0 1 4	10.0 2.4 1.7 5.7 0.3
Care in another home By grandparent . By other relative . By nonrelative	15 F 4.5 2.5 8.5	13 7 3.6 1.7 8.5	21.6 7 6 5.2 8 8	39.1 8.3 6.4 24.4	39.7 7 1 3.8 28 8	37.9 10 5 11 5 15 9	6 7 3 1 1 0 2.6	5.9 2 5 1.1 2 3	10.3 5.5 0 8 4.0
Organized child care facilities Day/group care center Nursery school/preschool	9.6 6.6 3.0	9.8 6.1 3 7	8 7 8 2 0.5	26.7 19.6 7.1	31 4 21.3 10.1	17 6 16.3 1.3	3 1 1.7 1.4	3 3 1.5 1.8	2.6 2.6
Kindergarten/grade school . Child cares for self Parent cares for child	55 1 2 8 2.7	59 4 2.7 2.6	40.5 3 0 2.8	0 6 3.5	0 5 5.0	0.8	75 5 3.8 2.3	77.3 3 5 1 9	67.9 5 0 4.2

<sup>&#</sup>x27;Includes women working at home or away from home 'Includes married, husband absent (including separated), widowed, divorced, and never-married women



Table 2. Employed Mothers Losing Time from Work During the Last Month Because of Failures in Child Care Arrangements, by Selected Characteristics

Characteristic	All w	omen	Married, husban	d present	All other marital statuses <sup>1</sup>		
	Number	Percent	Number	Percent	Number	bercent	
Number of women	7,713	5.9	5,495	60	2,218	5.6	
Number of children: 1 child	3,746	5.5	2,416	5.2	1,329	5.8	
	3,041	5 4	2,360	5 5	681	4.7	
	926	9.6	719	10.3	208	7.2	
Age of youngest child: Less than 1 year old 1 and 2 years old 3 and 4 years old 5 years old and over	983	8.7	796	9 1	187	(B)	
	2,297	5.2	1,774	5.2	523	5.2	
	2,074	6.3	1,492	7.6	583	2.9	
	2,360	5.0	1,434	3 7	925	7.2	
Employment status: Full time	5,686	5 5	3,998	5.7	1,688	5.1	
	2,027	7.0	1,497	6.9	530	7.2	

<sup>&#</sup>x27;Includes married, husband absent (including separated), widowed, divorced, and never-married women



Note Limited to women who use relatives, nonrelatives, day/group care centers, nurselles/preschools (excluding kindergaliten/gradeschool) in either a primary or secondary arrangement for any of their youngest children under 15 years

Table 3. Primary Child Care Arrangements of the Youngest Child Under 5, by Marital and Employment Status of the Mother: Winter 1984-85 and June 1982

(Women 18 to 44 years old. Numbers in thousands)

	Wii	nter 1984-85		•	June 1982	
Marital status of mother and type of child care arrangement	Total	Employed الدا الدا	Employed part time	Total	Employed full time	Employed part time
All Marital Statuses						
Number of children	6,666	4,263	2,403	4,826	3,088	1,738
	100.0	100.0	100.0	100.0	100.0	100.0
Care in child's home By father	28.8	23.2	39.2	32.1	27.2	41.2
	14.4	10.4	21.5	14.6	10.9	21.3
	5.5	4.9	6.7	6.2	5.7	7.1
	3.6	3.2	4.5	5.5	5.2	6.2
	5.3	4 7	6 5	5.8	5.4	6.6
Care in another home By grandparent By other relative By nonrelative	38.0	42.7	29.9	42.4	46.2	35.8
	10.9	11.2	10.5	11 9	12.5	10.9
	4.8	4.7	5.0	7.3	8.3	5.6
	22.3	26.8	14.4	23.2	25.4	19.3
Organized child care facilities	24.8	29.8	16.6	15 6	19.8	7.9
Day/group care center .	14.8	17 8	10.3	9.7	12.2	5.1
Nursery school/preschool <sup>1</sup> .	10.0	12.0	6.3	5.9	7.6	2.8
Parent cares for child <sup>2</sup> Other arrangements <sup>3</sup>	8.3	)	14.2	9.6	6.5 0.3	15.1 0.1
Married, Husband Present						
Number of children	5,311	3,350	1,961	3,894	2,398	1,496
Percent	100 0	100.0	100.0	100.0	100.0	100.0
Care in child's home By father By grandparent By other relative By nonrelative	∠8.9	23 3	38.6	31.8	27.0	39.6
	17.5	12 9	25.6	17.6	13.5	24.2
	3.1	3.6	2.3	4.6	4.5	4.9
	2.3	1.6	3.4	4.6	4.5	4.8
	6.0	5 2	7.3	5.0	4.5	5.9
Care in another home  By grandparent  By other relative  By nonrelative	37.5	43.1	27.9	42.9	47.3	35.7
	11 3	12.1	10.0	12.1	12.4	11.5
	4.5	4.9	3 8	6 9	8 1	5.0
	21.7	26.1	14.1	23.9	26.8	19 2
Organized child care facilities . Day/group care center Nursery school/preschool'	24 0	28.5	16.4	14 1	18.2	7.6
	13 8	16.5	9.2	9.0	11.7	4.8
	10.2	12.0	7.2	5.1	6.5	2.8
Parent cares for child <sup>2</sup> Other arrangments <sup>3</sup>	96	5.2	17.2	11.1 0 2	7.4 0 2	16.9 -
All Other Marital Statuses <sup>4</sup>						
Number of children Percent	1,356	913	442	932	690	242
	100 0	100.0	100.0	100 0	100.0	100.0
Care in child's home By father By grandparent By other relative By nonrelative	28.9	22.6	42.2	33 7	28.0	49.8
	2 1	1.4	3.7	2.0	1.6	3.3
	15.1	9.8	26.2	13.1	10.3	21.0
	9.0	8.8	9.3	9.3	7.5	14.4
	2.7	2.6	3.0	9.3	8.6	11.1
Care in another home By grandparent By other relative . By nonrelative	40.4	41.1	39.1	40 7	42.4	35.8
	9 4	7.8	12.8	11.3	12.9	7.0
	6.0	3 8	10.6	9.0	9.1	8.6
	25.0	29.5	15.7	20.4	20.4	20.2
Organized child care facilities	27.5	32.2	17.7	21.5	25.5	10.3
Day/group care center .	18.5	20.2	15.0	12.4	14.2	7.4
Nursery school/preschool'	9.0	12.0	2.7	9.1	11.3	2.9
Parent cares for child <sup>2</sup> Other arrangements <sup>3</sup>	3.1	4.1	1.0	3.5 0.5	3.3 0.7	4.1

Includes a small number of children enrolled in kindergarten

<sup>&</sup>lt;sup>3</sup>Includes child taking care of self
<sup>4</sup>Includes married, husband absent (including separated), widowed, divorced, and never-married women



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<sup>&</sup>lt;sup>2</sup>Includes women working at home or away from home.

Table 4. Primary Child Care Arrangements Used by Employed Mothers for Children Under 15, by Characteristics of Their Mothers

Part A. All Children

				Type of	primary	child c	are arrar	ngement						
Characteristic of mother			Care	in child	's home	by— (	Care in ar	nother ho	me by-	Day/		Kınder-	Child	Mother
	Number of children		Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group care center	Nursery/ pre- school	garten/ grade school	cares for self	cares for
Number of children	26,455	100.0	9.4	2.7	3.0	2.6	4.3	1.8	8.3	5.4	3.7	52.2	1.8	4.7
Race and Hispanıc origin: White	21,897 <b>3</b> ,783 1,650	100.0	10.2 5.0 10.5	4.5	2.2 7.7 3.5	2.9 1.3 3.0	4.1 5.6 7.6	1.6 3.1 1 2	8.6 6.7 4.6	5.0 7.8 5.6	3.5 4.0 3.5	52.4 51.6 48.4	1.9 1.3 3.1	5.3 1.3 2.9
Marital status: Married, husband present All other marital statuses³	20,839 5,616	100.0 100.0	11.7 0.9		2.2 6.1	2.9 1.6	4.2 4.5	1.6 2.5	8.2 8.5	5 1 6.6	3.9 3.0	51.4 55.1	1.6 2.8	
Educational attainment:  Not a high school graduate  High school graduate  College: 1 to 3 years  4 or more years	1 <b>1</b> ,954 5,504	100.0 100.0	12.3 9.7 10.7 5.0	2.8 2.3	4.4 3.5 2.7 1.2	2.4 1.4 2.3 5.8	4.7 5.4 3.6 2.1	3.4 1.7 1.4 1.0	4.9 8.0 9.7 10.2	3.2 5.3 6.1 6 9	2.4 30 4.0 60	52.3 52.6 49.6 54.1	2.1 1.9 1.8 1.5	3.7 4.6 <b>5</b> .7 4.7
Occupation: <sup>4</sup> Managerial-professional Technical, sales, and	• •		6.8		1.1	4.3	2.7	1.2	10.1	6.5	5.3	55.7	1.8	3.1
administrative support Service workers Precision production,	11,532 5,152		8.5 14.8	2.8 3.1	2.8 4.4	2.5 1.7	4.4 3.6	1.4 2.1	8.7 5.3	6.3 3.0	4.2 1.5	52.6 47.2	1.8 2.0	3.6 11.3
craft, and repair Operators, fabricators,		100.0	7.9	2.6	0.6	1.7	5.7	2.9	10.4	2.3	4.7	57.4	1.5	2.3
and laborers	•		10.0		5.6	1.3	7.9	3.6	8.4	3. <b>3</b>	2.5	51.2	1.7	0.9
and fishing	265	100.0	-	6.4	4.3	3.0	2.6	2.3	4.2	1.1	1.5	58.1	3.4	12.1



¹Includes women working at home or away from home.
²Persons of Hispanic origin may be of any race.
³Includes married, husband absent (including separated), widowed, divorced, and never-married women.
⁴Excludes women in the Armed Forces.

#### Table 4. Primary Child Care Arrangements Used by Employed Mothers for Children Under 15, by Characteristics of Their Mothers-Continuad

Part B. Children Under 5 Years

				Type o	f primary	child c	are arra	ngement						
Characteristic of mother	•		Care	ın child	's home	by-	Care in ar	nother ho	me by-	Day/	_	Kınder-	Child	Mother
	Number of children	Total	Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group care	Nursery/ pre- school	garten/ graoe school	cares for self	cares for
Number of children	8,168	100 0	15.7	5.7	3.7	5.9	10.2	4 5	22.3	14.0	9.1	0.8		8.1
Race and Hispanic origin.  White	1,131	100.0 100.0 100.0	17.4 5.8 18.4	4 9 8.7 12.1	2.7 10 6 5.0	6.4 3.7 6.9	11.0	3.9 8.8 2 6	22.9 18.3 13.0	12.7 21.4 11.9	8.7 9.8 8.6	0.8 0.4 0.7		9.3 1.8 4.1
Marital status: Married, husband present All other marital statuses <sup>3</sup>		100.0 100.0			2.6 8.6	6.5 2.9		4.1 6.4	21.8 24.4	12.7 19.6	9.6 7.1	0.8 0.6		9.2 3.5
Educational attainment: Not a high school graduate. High school graduate College: 1 to 3 years 4 or more years	3,523 1,806	100.0 100.0 100.0 100.0	19.8 16.7 18.2 7.9	6.3 5.6	7.0 4.2 2.8 1.3	6.4 2.6 4.5 14.2	13.9 8.3	8.4 4 4 4.0 2.3	14.8 22.3 22.6 27.4	7 8 14.4 14.7 16.8	7.2 7.8 8.7 13.9	0.5 0.9 0.3 1.2		6 7 10.2
Occupation: 4 Managerial-professional Technical, sales, and	1,750	100.0	12.1	1.6	1.1	11.4	6.2	3.4	28.1	16.9	13.5	1.1		4.5
administrative support Service workers		100.0 100.0			2 6 6.7	5 0 3.6		3.9 4.7	22.8 14.5	17.6 68	9.9 3.7	0.6 0.7		5.B 20.2
Precision production, craft, and repair Operators, fabricators,	180	100.0	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(8)	(B)	(B)	(B)
and laborers	877	100.0	13.0	8.2	7 9	2 1	19 3	8 7	22 1	8.4	7.2	1 3	•	2.2
and fishing	81	100.0	(B)	(B)	(B)	(B)	(8)	(B)	(B)	(B)	(B)	(B)	(B)	(B)



¹Includes women working at home or away from home.
²Persons of Hispanic origin may be of any race.
³Includes married, husband absent (including separated), widowed, divorced, and never-married women ⁴Excludes women in the Amed Forces.

Table 4. Primary Child Care Arrangements Used by Employed Mothers for Children Under 15, by Characteristics of Their Mothers-Continued

Part C. Children 5 to 14 Years

				Туре о	f primary	child o	care arrai	ngement						
Characteristic of mother			Care	in child	's home	by-	Care in ar	nother ho	me by-			Kınder-	Child	M-ab-a-
	Number of children		Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group	Nursery/ pre- school	garten/ grade school	cares for self	Mother cares for child
Number of children	18,287	100.0	6.6	1.3	2.7	1.1	1.7	0.5	2.1	1.6	1.2	75.2	27	2.0
Race and Hispanic					,	• • • •		0.0	2.1	1.0	1.2	/5.2	2.7	3.2
White	2.652	100.0	7.0 4.7 6.7	1.1 2.8 3.1	2.0 6.5 2.8	1.3 0.2 1.1	3.4	0.5 0.7 0.4	2.2 1.7 0.5	1.5 2.0 2.5	1.2 1.6 1.1	75.6 73.5 71.4	2.8 1.9 4.6	3.5 1.1 2.3
Marital status:  Married, husband present  All other marital statuses <sup>3</sup>	14,202 4,085	100.0 100.0	8.4 0.4	1.2 1.8	2.0 5.1	1.1 1.2	1.3 3.1	0.4	1.9 2.6	1.6 1.7	1.2	75.1	2.3	3.4
Educational attainment:	.,		• • •	1.0	0.1	1.2	5.1	1.0	20	1.7	1.4	75.5	3.8	2.3
Not a high school graduate	3,698	100.0 100.0	9.2 6.8 7.1 3.5	2.2 1.3 0.7 1.3	3.3 3.2 2.7 1.1	0.7 1.0 1.3 1.8	1.9 1.4	1.3 0.6 0.1 0.3	0.6 2.1 3.4 1.7	1.3 1.5 1.8 2.1	0.4 1.0 1.7 2.1	74.4 74.2 73.7 80.0	3.6 2.7 2.7 2.2	1.4 3.8 3.4 2.9
Occupation:									***			00.0	2.2	2.3
Managerial-professional Technical, sales, and	3,977	100.0	4.5	1.3	1.1	1.2	1.2	0.3	2.1	1.9	1.7	79 7	2.6	2.4
administrative support Service workers	7,924 3,495		5.6 10.5	1.3 1.0	2.8 3.4	1.4 0.7	1.4 1.6	0.2 0.8	2.2 0.9	2.0 1.1	1.5 0.5	76.3 69.3	2.6 3.0	2.6 7.1
craft, and repair		100.0	5.8	8.0	8.0	-	2 1	1.7	39	-	1.5	78.8	2.1	2.3
and laborers	2,212	100.0	8.8	1.9	4.7	1.0	3.3	1.6	3.0	1.2	0 6	71 1	2.3	0.4
fishing	184	100.0	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)



Includes women working at home or away from home.

Persons of Hispanic origin may be of any race.

Includes married, husband absent (including separated), widowed, divorced, and never-married women.

Excludes women in the Armed Forces.

Table 5. Primary Child Care Arrangements Used by Full-Time Working Mothers for Children Under 15, by **Characteristics of Their Mothers** 

Part A. All Children

			•	Type of	primary	child c	are arra	ngemen	t					
Characteristic of mother	•		Care	ın child	's home	by- (	Care in ar	nother ho	me by-	Dav/		Kinder-	Child	Mother
	Number of children	Total	Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group care	Nursery/ pre- school	garten/ grade school	cares for self	cares for child
Number of children .	16,812	100.0	6.7	2.5	3.2	2.3	4.4	1.7	9.8	6.3	4.5	53.4	2.1	3.0
Race and Hispanic origin. White Black Hispanic <sup>2</sup>		100.0 100.0 100.0	7.0 5.2 7.5	2 1 3.8 6.3	2.3 7.5 3 8	2.5 1.4 4.3	4.3 5.1 6.9	1.5 2.4 1.0	10.6 6.7 5.5	6.3 6.8 6.5	4.4 4.7 4.5	53.6 53.2 47.0	2.2 1.6 3.4	3.2 1.4 3.0
Marital status: Married, husband present All other marital statuses <sup>3</sup>	12,475 . 4,337		9 0 0.3	2.0 3.9	2 3 5 8	2.5 1.7	4.7 3.6	1.7 1.7	10.3 8.5	6.4 6.1	4.8 3 7	51.3 59.4	1.9 2.7	3.1 2.6
Educational attainment: Not a high school graduate High school graduate College: 1 to 3 years 4 or more years .			10.4 6.7 7.8 2.9	3.4 2.4 2.5 2.0	4.5 3.5 3.3 1.2	1.9 1.8 1.9 4.0	4 3 5.6 3.9 2.1	3.5 1.5 1.1 1.4	5.5 9.6 10.9 12.5	4.9 6.1 7.1 7.5	3.6 3.9 5.2 6.2	53.8 53.0 51.7 55.8	2.7 2 2 1.6 1.8	1.6 3.5 2.9 2.7
Occupation: 4 Managerial-professional	3,789	100.0	4.5	1.7	1.3	3.2	3.4	1 0	11.6	7 0	5.6	61.1	2.1	1.6
Technical, sales, and administrative support Service workers		100.0 100 0	5.5 10.3		3.0 4 6	2 1.9	4.0 2.4	1.2 1.9	10.0 7.4	8.2 3.3	55 1 o	53.9 48 4	2.1 2.7	1.3 13.6
Precision production, craft, and repair Operators, fabricators,	571	100.0	9.1	2.1	0.7	19	5.8	2.5	11.2	2.6	5.4	55.5	1.8	1.1
and laborers Farming, forestry, and fishing	2,518 138	100.0	10 7 (B)	2.7 (B)	5.6 (B)	1.4 (B)	8.8 (B)	3.9 (B)	8.6 (B)	3.5 (B)	2 9 (B)	50.0 (B)	1.6 (B)	0.4 (B)



¹Includes women working at home or away from home ²Persons of Hispanic origin may be of any race. ³Includes married, husband absent (iricluding separated), widowed, divorced, and never married women. ⁴Excludes women in the Armed Forces

Table 5. Primary Child Care Arrangements Used by Full-Time Working Mothers for Children Under 15, by Characteristics of Their Mothers-Continued

Part B. Children Under 5 Years

				Type o	f primary	child c	are arrar	ngement						
Characteristic of mother	•		Care	ın child	's home	by— (	Care 🗀 ar	nother hor	ne by—	Day/	_	Kınder-	Child	Mother
	Number of children	Total	Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group care center	Nursery/ pre- school	garten/ grade school	cares for self	cares for child <sup>1</sup>
Number of children	5,060	100.0	10.7	5.1	3.6	5.0	10.5	4.2	27.5	16.5	11.5	0.4	_	5.0
Race and Hispanic origin:  White		100.0 100.0 100.0	11.6 6.1 13.2	4.5 5.8 14.0	2.3 10.6 3 1	5 1 4.6 9.6	10.8 11.1 13.7	3.7 7 3 1 6	29 5 18.8 14.8	15 9 20.2 15.0	10.8 12 7 10.1	05	-	5.5 2.5 3.6
Marital status: Married, husband present All other marital statuses <sup>3</sup> .	4,051 1,009		13.1 1.3	3.7 10.7	2 4 8.3	5.5 2.9	11.4 7.1	4.3 3.8	27.1 28.8	15.3 21 3	11.8 10 1	0.4 0.5		5.0 5.0
Educational attainment:  Not a high school graduate  High school graduate  College: 1 to 3 years  4 or mr.e years	2,339 1,030		14.6 11.7 12.6 3.7	8.6 5.0 5.6 2.3	6.6 3.9 3.3 1.2	7.0 3.0 3.8 9.3	8.8 14 2 9.5 4.3	7.5 4.1 3.0 3.3	17.9 26.7 28.3 35 1	12 6 15.9 17.8 19.5	11.6 9 7 11.9 15.0	0.9 0.5		4.0 5.2 4 3 5.8
Occupation: <sup>4</sup> Managerial-professional Technical, sales, and	1,107	100.0	77	2.2	1.4	8.0	7.9	2.3	34.9	18.9	14 7	0.4	-	1.5
administrative support Service workers Precision production, craft,	2,245 706	100.0 100.0	10.2 17.4	6.5 3.1	2.7 5.2	4.3 5.2	8.9 8.1	3.6 3.7	28.0 21.0	21.2 8 5	13.5 3.5	0.8	-	2.0 23.5
and repair		100.0	(B) 12.7	(B) 7.0	(B) 7.4	(B) 2.0	(B) 20 3	(B) 9 6	(B) 22.1	(B) 8.5	(B) 7 9	(B) 1 4	(B)	(B)
Farming, forestry, and fishing		100.0	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	8)	(B)	1.3 (B)



¹Includes women working at home or away from home ²Persons of Hispanic origin may be of any race. ³Includes married, husband absent (including separated), widowed, divorced, and never married women ⁴Excludes women in the Armed Forces.

Table 5. Primary Child Care Arrangements Used by Full-Time Working Mothers for Children Under 15, by Characteristics of Their Mothers—Continued

Part C. Children 5 to 14 Years

				Type o	f primary	child c	are arrar	ngement						
Characteristic of mother	•	_	Care	ın child	's home	by- C	Care in ar	nother ; c	me b <sub>/</sub> -	Day/		Kınder-	C, ald	Mother
	Number of chi <sup>l</sup> dren	Total	Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group	Nursery/ pre- school	garten/ grade school	cares for self	cares for
Number of children	11,752	100.0	5.0	1 4	3 0	1 1	18	0.6	2.2	2.0	1.6	76.2	3.0	2.1
Race and Hispanic White Black Hispanic <sup>2</sup>	2,169	100.0 100.0 100 0	5.1 4.9 4 6		2.3 6 3 4 1	1.4 0.3 1.6	1.5 2 9 3 4	0.6 0.6 0.7	2.3 2.1 0.8	2.0 1 8 2.1	1.6 1.7 1.6	77.0 73.0 70 5	3.1 2.2 5.2	
Marital status: Married, husband present . All of ar marital statuses <sup>3</sup>	8,424 3,328	100.0 100.0	7.0	1.2 1.8	2.3 5.0	1.1 1.4	1.1 2.5	1.5 1.1	2.1 2.3	2.1 1.5	1.5 1.8	75.8 77.3	2.8 3.5	
Educational attainment:  Not a high school graduate  High school graduate  College: 1 to 3 years  or more years	5,407 2,317	100.0 100.0 100.0 100 0	8.8 4 5 5 6 2.5	1.3 1 1	3.7 3.4 3.4 1.2	1 J 1.1 1.6	2 6 1.9 1.5 1.1	1.9 0.4 0.2 ( 5	0.8 2.3 3.2 2.2	1.9 1.8 2.4 2.0	0.6 1.4 2.2 2.1	73.8 75.8 74.6 81 1	3.7 3.2 2.4 2.6	2. ; 2. 3
Occupation: 4 Managerial-professional	2,682	100.0	3.2	1 5	1 2	1.3	1.5	0.4	2.1	2.1	1.8	86 2	2.9	1.6
Technical, sales, and administrative support Service workers		100.0 100 0	3 7 7 2		3.2 4.4	1.4 0 5	1 9 0.0	0.2 1.1	2.1 1.6	2.6 1.1	2.0 0.8	77 <b>4</b> 68.6	3.0 3.9	
Precision production, craft, and repair Operators, fabricators, and laborers Farming, forestry, and fishing	1,749	100 0 100.0 100 0	6 8 9.8 (B)	0.8	1.0 4.7 (B)	1.1 (B)	1.2 3.7 (B)	2.0 1.4 (B)	4.6 2.7 (B)	1.3 (B)	1.7 0.7 (B)	77.5 71.3 (B)	2.4 2.3 (B)	-

<sup>&#</sup>x27;Includes women working at home or away from home.



<sup>&</sup>lt;sup>2</sup>Persons of Hispanic origin may be of any race.

Includes married, husband absent (including separated), widowed, divorced, and never married women

<sup>\*</sup>Excludes women in the Armed Forces

Table 6. Primary Child Care Arrangements Used by Part-Time Wo. ing Mothers for Children Under 15, by **Characteristics of Their Mothers** 

Part A. All Children

				Type of	primary	child c	are arra	ngement						
Characteristic of mother			Care	ın child	l's home	by-	Care in ar	nother ho	me by-	Day/	,	Kınder-	Child	Mothe
	Number of children	Total	Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group	Nursery/ pre- school	garten/ grade school	cares for self	cares for child
Number of children	9,643	100 ១	14.1	3.0	2.7	3 1	4.1	1.9	5 7	3.9	2.2	50.2	1.4	7.8
Race and Hispanic origin: White	8,692 808 511	100.0 100.0 100.0	15.1 4.6 17.0	2.6 7.1 5.3	2.2 8.7 2.9	3.4 0 5		1.6 5.3 1.6	5.5 6.7 2.5	3.1 11.3 3.5	2.2 1.6 1.4	50.7 45.4 50.9	1.5 0.5 2.3	8.5 0.7 2.9
Marital status: Married, husband present All other marital statuses³			15.8 3.0	1.6 12.0	2.1 7.1	3.4 1.4	3.6 7.6	1.4 5.2	5.2 8.8	3.2 8.2	2.4 0.5	51.7 40 5	1.1 3 0	8.5 2.8
Educational attainment:  Not a high school graduate  High school graduate  Collega: 1 to 3 years  4 or more years		100.0 100.0	15.8 11.9 15.4 8.8	5.2 2.7 2.0 1.2	4.4 2.6 1.7 1.1	3.2 0.5 2.9 9.1	5.5 3.9 3 1 2.0	3.4 1.6 1.9 0.3	3 9 3.9 7.9 6.0	0.4 3 1 4.5 6 0	0.5 1.0 2.3 5.7	49.7 40.4 46.5 50.9	1.0 1.1 2.1 0.9	7.2 5.3 9.8 8.1
Occupation:  Managerial-professional Technical, sales, and	•	100.0	10.0	0 8	0 7	5.7	1.5	1.7	6.5	5.4	4.5	41.8	0.5	5.5
administrative support Service workers	4,134 2,785		14.1 18.6	2.3 4.2	2.3 4.3	3.1 1.4	5.1 4.6	1.5 2. <i>2</i>	6.3 3.5	4.3 2.6	1.8 1 4	50 2 46.3	1.3 1.4	7.7 9.4
craft, and repair Operators, fabricators,		100.6	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
and laborers Farming, forestry, and fishing		100 0 100.0	6.7 (B)	7.7 (B)	5.6 (B)	1 1 (B)	4.0 (B)	2 3 (B)	7.5 (B)	2.3 (B)	0.4 (B)	56 9 (B)	1.6 (B)	3.2 (B)



Includes women working at home or away from home.

Persons of Hispanic origin may be of any race

Includes married, husband absent (including separated), widowed, divorced, and never married women Excludes women in the Armed Forces.

Table 6. Primary Child Care Arrangements Used by Part-Time Working Mothers for Children Under 15, by Characteristics of Their Mothers-Continued

Part B. Children Under 5 Years

				Type o	f primary	child c	are arrar	ngement						
Characteristic	•		Care	in child	's home	by-	Care in ar	nother ho	me by-	Day/	_	Kinder-	Child	Mother
	Number of children	Total	Father	Grand- parent	Other relative		Grand- parent	Other relative	Non- relative	group care	Nursery/ pre- school	garten/ grade school	cares for self	cares for child
Number of children	3,108	100.0	23.8	6.7	4.0	7.3	9.7	5.0	13.8	9.9	5.3	1.3		13.3
R <sub>e</sub> ce and Hispanic origin: WniteBlackBlack Hispanic <sup>2</sup>		100.0 100.0 100.0	26.0 5.3 (B)	5.5 15.5 (B)	3.3 10.2 (B)	8.2 1.2 (B)	9.3 10.6 (B)	4.3 11.8 (B)	13.2 16.8 (B)	8.2 24.5 (B)	5.6 2.5 (B)	1.4 1.2 (B)	- - (B)	15.1 - (B)
Marital status: Married, husband present All other marital statuses <sup>3</sup>		100.0 100.0	27.8 4.0	2.7 26.8	2.9 9.2	8.2 3.1	9.5 10.5	3. <b>7</b> 11.5	13.4 15.9	8.6 16.3	6.1 1.3	1.4 0.8	-	15 8 0.8
Edurational attainment:  Not a high school graduate  High school graduate  College: 1 to 3 years  4 or more years	1,184 776	100.0 100.0 100.0 100.0	26.8 26.4 25.5 14.5	8.6 8.8 5.5 2.7	7.8 4.8 2.2 1.6	5.3 1.7 5.4 21.9	12.9 13.2 6.6 4.1	9.8 4.9 5.4 0.8	10.6 13.4 15.2 15.3	1.2 11.6 11.0 12.6	1.4 4.0 4.5 12.3	1.8 0.6 2.4		15.7 9.5 18.2 12.1
Occupation:4  Managerial-professional  Technical, sales, and	642	100.0	19.8	0.6	0.6	17.3	3.4	5.1	16.4	13.4	11.5	2.3	•	9.7
administrative support Service workers Precision production,		100.0 100.0	23.9 28.5	5.1 10.9	2.5 7.7	6.6 2.5	14.2 7.5	4.3 5.4	14.2 9.8	11.6 5.5	4.0 3.8	1.5 0.6	-	12.0 17.8
craft, and repair		100.0	(B)	(B)	(B) (B)	(B)	(B) (B)	(B) (B)	(B) (B)	(B) (B)	(B)	(B)	(B) (B)	(B)
Farming, forestry, and fishing		100.0	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)

Includes women working at home or away from home.



Persons of Hispanic origin may be of any race.

Includes married, husband absent (including separated), widowed, divorced, and never married women.

Excludes women in the Armed Forces.

Table 6. Primary Child Care Arrangements Used by Part-Time Working Mothers for Children Under 15, by Characteristics of their Mothers-Continued

Part C. Children 5 to 14 years

				Type o	f primary	child c	are arran	gement						
Characteristic of mother	-		Care	ın child	's home	by—	Care in ar	nother ho	ne by-	Day/		Kınder-	Chik	Mothe
	Number of children	Total	Father	Grand- parent	Other relative		Grand- parent	Cther relative	Non- relative	group care	Nursery/ pre- school	garten/ grade school	cares for self	cares for
Number of children	6,535	100.0	9.5	1.2	2.2	1.1	1 5	0.4	1.8	1.0	0.6	73.4	2.1	5.1
Race and Hispanic White		100.0 100.0 100.0	10.1 4.1 11.1	1.2 1.4 4.5	1.6 7.6	1.2	1.0 5.3 3 1	0.4 1.0	2.0	0.8 2.5 3.3	0.6 1.0	73 4 74.7 72.4	2.2 0.8 3.3	1.2
Marital status: Married, husband present All other marital statuses <sup>3</sup>	5,778 757		10.5 2.4	1.2 1.7	1 7 5.7	1.2 0.3	0.9 5.5	0.4 0.8	1.6 4.0	0.8 2.6	0.7	74.1 67.9	1.7 5.0	5.3 4.2
Educational attainment.  Not a high school graduate  High school graduate  College: 1 to 3 years  4 or more years	3,023 1,381	100.0	10.0 10.9 9.7 5.6	3.5 1.4 0.3	2.6 2.8 1 4 0.9	2.0 0.3 1.5 2.1	1.6 1 8 1.1 0.9	09	0 4 1.8 3.8 1.0	0.9 0.8 2.3	0 2 1.0 2.0	75.7 71.6 72.2 77.8	1.5 1 9 3.3 1.4	2.8 5.7 5.1 5.8
Occupation:  Managerial-professional  Technical, sales, and	1,294	100.0	5.2	0.9	0.7	-	0.5	-	1.6	1.5	1.1	61.4	0.7	3.5
administrative support Service workers			9.2 13.5	0.9 0.7	2.2 2.5	1.4 0.9	0 6 3.1	0.2 0.6	2.4 0.3	0.8 1.1	0.7 0.2	74.2 70.0	2.0 2.2	5.5 5.0
craft, and repair		100.0	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
and laborers Farming, forestry, and fishing		100.0 100.0	4.7 (B)	5.8 (B)	4.3 (B)	0.6 (B)	1.9 (B)	2.4 (B)	4.3 (B)	0.9 (B)	(B)	70 O (B)	1.9 (B)	1.9 (B)

Includes women working at home or away from home.

\*Excludes women in the Armed Forces.



Persons of Hispanic origin may be of : , race.

\*\*Includes married, husband absent (including separated), widowed, divorced, and never married women.

Table 7. Secondary Child Care Arrangements Used by Employed Mothers for Children Under 15, by Age of Child

	Tot	al employed	1	Empl	oyed full tir	ne	Emplo	yed part tii	ne
Age of child and type of primary	U	Ising secon	dary care	Ų	Ising secon	dary care	U	sing second	dary care
child care arrangement	Total	Number	Percent	Total	Number	Percent	Total	Number	Percent
All Children		· ·					•		
Number of children	26,455	6,867	26.0	16,812	5,575	33.2	9,643	1,292	13.4
Care in child's home	4,699 2,496 712 804 687	683 325 80 107 111	14.5 15.4 11.3 13.3 16.2	2,480 1,133 423 539 385	421 263 51 58 49	170 23.2 12.1 10.8 128	2,219 1,363 289 265 302	258 121 28 48 61	11.6 8 9 9.7 18.2 20.3
Care in another home	3,801 1,138 467 2,196	576 138 45 393	15.2 12 1 9.6 17.9	2,675 743 285 1,647	396 97 29 270	14.8 13.0 10.2 16 4	1,126 395 182 549	178 41 14 123	15.8 10.4 (B) 22.4
Organized child care facilities Day/group care center Nursery school/preschool	2,411 1,440 971	488 216 272	20.2 15.0 28.0	1,830 1,067 763	395 147 248	21.6 13.8 32.4	581 373 208	91 67 24	15.7 18.0 11.5
Kindergarten/grade school Child cares for self Parent cares for child'	13,815 488 1,245	5,048 24 52	36.5 4.9 4.2	8,976 354 497	4,320 24 18	48 1 6.8 3.6	4,839 134 748	728 - 34	15.0 (B) 4.6
Children Under 5 Years									
Number of children	8,168	1,073	13 1	5,060	726	14.3	3,108	347	11.2
Care In child's home	2,535 1,282 468 306 479	304 197 26 25 56	12.0 15.4 5.6 8.2 11.7	1,235 542 259 183 251	183 142 23 9 9	14.8 26.2 8.9 (B) 3.6	1,300 740 209 123 228	121 55 3 16 47	9.3 7.4 1.4 (B) 20.6
Care in another home	3,019 833 367 1,819	385 93 34 258	12.7 11.2 9.2 14.2	2,135 533 212 1,390	255 58 21 176	11.9 10.9 9.6 12.7	884 300 155 429	132 35 13 83	14.9 12.0 (B) 19.3
Organized child care facilities  Day/group care center  Nursery school/preschool	1,888 1,142 746	357 156 201	18.9 13.7 26.9	1,415 835 530	283 97 186	20.0 11.6 32 1	473 307 166	75 59 16	15.9 19.2 (B)
Kindergarten/grade school	62 664	11 13	(B) (B) 2.0	21 252	- - 5	(B) (B) 2.0	41 412	<sup>1</sup> 1 - 8	(B) (B) 1 9
Children 5 to 14 Years									
Number of children	18,287	5.794	31.7	11,752	4,850	412	6,535	944	14 4
Care in child's home  By father	2,164 1,214 244 498 208	375 136 52 81 56	17.4 15.3 21.3 16.3 27.1	1,245 591 164 356 134	236 120 28 48 40	19 0 20.3 (B) 13.5 (B)	919 623 80 142 74	138 66 24 32 16	15 1 10.6 (B) (B) (B)
Care in another home	782 305 100 377	190 45 10 135	24.3 14 9 (B) 35 7	540 210 73 257	143 40 8 95	26 6 19 0 (B) 37.1	242 95 27 120	46 5 1 40	19.1 (B) (B) (B)
Organized child care facilities Day/group care center Nursery school/preschool	523 298 225	129 58 71	24.7 19.5 31.4	415 232 183	112 49 63	27.0 21 1 (B)	108 66 42	18 9 9	(B) (B)
Kindergarten/grade school Child cares for self Parent cares for child¹	13,753 488 581	5,037 24 39	36.6 4.9 6 7	8,955 354 245	4,320 24 13	48.2 6.8 5 3	4,798 134 336	716 26	14.9 (B) 7.7

<sup>&#</sup>x27;Includes women working at home or away from home



Table 8. Percent Distribution of Weekly Cash Payments Made by Employed Mothers for Child Cara Arrangements, by Selected Characteristics

(ivumbers in thousands)

							Pay	ıng casl	1				
Characteristic	Total	Not paying cash (	Number	Total	Under \$10	\$10 to \$19	\$20 to \$29	\$30 to \$39	\$40 to \$49	\$50 to \$59	\$60 to \$69		Median (dollars)
Number of women	7,713	2,414	5,299	100.0	3.8	11.0	20.7	19.4	15 7	12.9	5.9	10.6	37.5
Number of children: 1 child	3,746 3,041 926	1,303 822 289	2,443 2,219 638	100.0 100.0 100.0	3.5 3.8 5.2	11.0 9.3 17.1	24.5 17.4 17.6	21.7 18.7 12.6	17.2 14.8 12.8	12.7 13.3 12.5	4.8 7.7 4.5	4.7 15.0 17.7	35.1 40.5 38.0
Age of youngest child: Less than 1 year old	_ : = =	337 316 273 293 254 793 147	646 841 867 818 709 1,377 42	100.0 100.0 100.0 100.0 100.0 100.0 100.0	1 2 3. , 2.6 3.9 3.1 6.8 (B)	10.6 4.6 7.8 6.3 12.8 18.9 (B)	15.6 19.3 18.9 14.4 22.3 26.0 (B)	20.4 16.1 18.8 21.4 19.3 20.7 (B)	14.2 19.3 14.7 22.8 15.1 11.3 (B)	20.3 11.0 18.6 15.0 11.7 6.9 (B)	3.4 9.3 6.1 5.9 5.0 5.7 (B)	14.4 17.3 12.5 10.3 10.7 3.7 (B)	41.6 43.6 41.4 41.8 36.1 29.4 (B)
Employment status: Full time	5,686 2,027	1,597 817	4,089 1,210	100.0 100.0	2.2 9.4	8.3 20.3	18.7 27 3	20.1 17.0	16.8 12.1	15.4 4.5	7.1 2.2	11.4 7.2	40.5 27.5
Marital status: Married, husband present All other martital statuses!		1,549 865	3,946 1,353	100.0 100.0	3.9 3.6	9.8 14.4	19.4 24.5	19.2 19.7	15.6 15.9	14.5 8.2	5.9 6.1	11.5 7.5	38.8 33.8

¹Includes married, husband absent (including separated), widowed, divorced, and never married women. Note: Median cash payments derived from more detailed distribution of dollar amounts.



## Appendix A. Overview of the SIPP Program

#### **BACKGROUND**

The Survey of Income and Program Participation (SIPP) provides a major expansion in the kind and amount of information available to analyze the economic situation of households and persons in the United States. The information supplied by this survey is expected to provide a better understanding of the level and changes in the level of well-being of the population and of how economic situations are related to the demographic and social characteristics of individuals. The data collected in SIPP will be especially useful in studying Federal transfer programs, estimating program cost and effectiveness, and assessing the effect of proposed changes in program regulations and benefit levels. Analysis of other important national issues, such as tax reform, Social Security program costs, and national health insurance can be expanded and refined, based on the information from this new survey.

The first interviews in the SIPP took place in October 1983, nearly 8 years after the research and developmental phase, the Income Survey Development Program (ISDP), was initiated by the Department of Health, Education, and Welfare, in 1975 Between 1975 and 1980 extensive research was undertaken to design and test new procedures for collecting income and related socioeconomic data on a subannual basis in a longitudinal framework. Much of the work centered around four experimental field tests that were conducted in collaboration with the Bureau of the Census to examine different concepts, procedures, questionnaires, and recall periods Two of the tests were restricted to a small number of geographic sites; the other two were nationwide. In the first nationwide test, the 1978 Research Panel, approximately 2,000 households were interviewed. Because of the relatively small number of interviews, controlled experimental comparisons of alternatives were not possible; however, the panel did demonstrate that many new ideas and methods were feasible. It also laid a foundation for the largest and most complex test the 1979 Research Panel. This panel consisted of a nationally representative sample of 8,200 households and provided a vehicle for feasibility tests and controlled experiments of alternative design features.

In the fall of 1981, virtually all funding for ISDP research and planning of the continuing SIPP program was deleted from the budget of the Social Security Administration. The loss of funding for fiscal year 1982 brought all work on the new survey to a halt. In fiscal year 1983, however, money for initiation of the new survey was allotted in the budget of the Bureau of the Census. Work began almost immediately in a ration for the curvey start in October 1983. The design

of the questionnaire for the first interview was similar in structure to that used in the 1979 ISDP panel study with two important exceptions. First, the reference period for the questions was extended from 3 months to 4 months in order to reduce the number of interviews and, therefore, lower costs. Second, the questions covering labor force activity were expanded in order to provide estimates that were closer, on a conceptual basis, to those derived from the Current Population Survey (CPS). The design also incorporated a number of other modifications resulting from experience with the 1979 pillot study.

#### SURVEY CONTENT

There are three basic elements contained in the overall design of the survey content. The first is a control card that serves several important functions. The control card is used to record basic social and demographic characteristics for each person in the household at the time of the initial interview. Because households are interviewed a total of eight or nine times, the card is also used to record changes in characteristics such as age, educational attainment, and marital status, and to record the dates when persons enter or leave the household. Finally, during each interview, information on each source of income received and the name of each job or business is transcribed to the card so that this information can be used in the updating process in subsequent interviews.

The second major element of the survey content is the core portion of the questionnaire. The core questions are repeated at each interview and cover labor force activity, the types and amounts of income received during the 4-month reference period, and participation status in various programs. Some of the important elements of labor force activity are recorded separately for each week of the period. Income recipiency and amounts are recorded on a monthly basis with the exception of amounts of property income (interest, dividends, rent, etc.) Data for these types are recorded as totals for the 4-month period. The core also contains questions covering attendance in postsecondary schools, private health insurance coverage, public or subsidized rental housing, low-income energy assistance, and school breakfast and lunch participation.

The third major element is the various supplements or topical modules that will be included during selected household visits. The topical modules cover areas that need not be examined every 4 months. Certain of these topical modules are considered to be so important that they are

viewed as an integral part of the overal! survey. Other topical modules have more specific and more limited purposes. No topical modules were included in the first or second waves of SIPP during the first year of the survey. (See the following section on sample design and table A-1 for a definition of the term "wave.") The third wave topical module covered (1) educational attainment, (2) work history, and (3) health characteristics (including disability). The fourth wave topical module covered (1) assets and liabilities, (2) pension plan coverage, and (3) housing characteristics. The fifth wave topical module covered (1) child care, (2) child support agreements, (3) support for nonhousehold members, (4) program participation history, and (5) reasons for not working. The sixth wave topical module covered (1) calendar year income and benefits, (2) taxes, and (3) education and training. The seventh wave topical module updated informatio. collected in the fourth wave, and the eighth wave topical module covered (1) support for nonhousehold members, (2) marital history, (3) migration history, and (4) fertility. The ninth wave topical module collected data on (1) calendar year income and benefits, (2) taxes, and (3) school enrollment and financing.

#### SAMPLE DESIGN

The SIPP sample design for the 1984 panel consists of about 26,000 housing units selected to represent the noninstitutional population of the United States. (See appendix C for more details on the procedures used to select the sample.) About 20,900 of these we:e occupied and eligible for interview. Table A-1 shows the sample design for the first panel of SIPP. Each household in the sample was scheduled to be interviewed at 4-month intervals over a period of 21/2 years beginning in October 1983. The reference period for the questions is the 4-month period preceding the interview. For example, households interviewed in October 1983 were asked questions for the months June, July, August, and September. This household was interviewed again in February 1984 for the October through January period. The sample households within a given panel are divided into four subsan, Jes of nearly equal size. These subsamples are called rotal tion groups and one rotation group is interviewed each month. in general, one cycle of four interviews covering the entire sample, using the same questionnaire, is called a wave. This design was chosen because it provides a smooth and steady work load for data collection and processing.

New panels of smaller size were introduced in February 1985 and 1986 and a new panel is scheduled to be introduced in February of 1987. This overlapping design provides a larger sample size from which cross-sectional estimates can be made. The overlap also enhances the survey's ability to

measure change by lowering the standard errors on differences between estimates for two points in time.

#### SURVEY OPERATIONS

Data collection operations are managed through the Census Bureau's 12 permanent regional offices. A staff of interviewers assigned to SIPP conduct interviews by personal visit each month with most interviewing completed during the first 2 weeks of that month. Completed questionnaires are transmitted to the regional offices where they undergo an extensive clerical edit before being entered into the Bureau's SIPP data processing system. Upon entering this processing system the data are subjected to a detailed computer edit. Errors identified in this phase are corrected and computer processing continues.

Two of the major steps of computer processing are the assignment of weights to each sample person and imputation for missing survey responses. The weighting procedures assure that SIPP estimates of the number of persons agree with independent estimates of the population within specified age, race, and sex categories. The procedures also assure close correspondence with monthly CPS estimates of households. In almost all cases, a survey nonresponse is assigned a value in the imputation phase of processing. The imputation for missing responses is based on procedures generally referred to as the "hot deck" approach. This approach assigns values for nonresponses from sample persons who did provide responses and who have characteristics similar to those of the nonrespondents.

The longitudinal design of SIPP dictates that all persons 15 years old and over present as nousehold members at the time of the first interview be part of the survey throughout the entire 2½ year-period. To meet this goal the survey collects information useful in locating persons who move. In addition, field procedures were established that allow for the transfer of sample cases between regional offices. Persons moving within a 100-mile radius of an original sampling area (a county or group of counties) are followed and continue with the normal personal interviews at 4 month intervals. Those moving to a new residence that falls outside the 100 mile radius of any SIPP sampling area are interviewed by telephone. The geographic areas defined by these rules contain more than 95 percent of the U.S. population.

Because most types of analysis using SIPP data will be dependent not on data for individuals but on groups of individuals (households, families, etc.), previsions were made to interview all "new" persons living with original sample persons (those interviewed in the first wave). These new sample persons entering the survey through contact with original sample persons are considered as part of the sample only while residing with the original sample person.



## **Appendix B. Definitions and Explanations**

**Population coverage.** The estimates in this report are restricted to the civilian, noninstitutional population of the United States and members of the Armed Force living off post or with their families on post. The estimates exclude persons in group quarters.

Age. The age (in years) of the child is based on the age of the person at his last birthday.

Race. The population is divided into three groups on the basis of race: White, Black, and "other races." The last category includes American Indians, Asian/Pacific Islanders, and any other race except White and Black.

Hispanic or Spanish origin. Persons of Hispanic, or Spanish origin were determined on the basis of a quescion that asked for self-identification of the person's origin or descent. Respondents were asked to select their origin (or the origin of some other household member) from a "flash card" listing ethnic origins. Hispanics, in particular, were those who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish origin. It should be noted that Hispanics may be of any race.

Marital status. Data refer to marital status at the time of the survey. The two classifications are used in this report. "married, spouse present" and "all other marital statuses" (also called "unmarried"). The latter classification includes persons who are separated, married but whose spouse is absent from the household, widowed, divorced, or single (never married).

Children. Children in this report refer to all persors under 15 years old in households who are living either with their natural parents, adopted or step-parents, or with legal guardians. Excluded are children in foster homes. Preschool age children are defined as children under 5 years old while grade school age children are those 5 to 14 years old. Infants are defined as children under 1 year of age.

Child care arrangements. Data on child care arrangements were obtained from persons interviewed from January to April 1985, who were the parents or legal guardians of children under 15 years old at the time of the interview and were employed during the month prior to the interview. The arrangements used to care for their children refer to the arrangements usually used during the month receding the review while the parent/guardian was at work.

Child care arrangements for each child were c'assified as either primary or secondary arrangements depending on which arrangement was used most and writch was used second most (as measured in hours) during a typical week. Attending school and care by the child himself were also included as possible child care a rangements since they indicate what the child was doing during the hours that the mother was at work.

Child car expenses. The monetary amounts shown in this report represent the estimated weekly costs for all children under 15 years of age while the mother was at work. Excluded are the amounts of any noncash payments made for child care services. Costs attributable to nursery or preschools are included but costs incurred when enrolling a child in kindergarten or grade school are excluded from the estimates.

Median cost of child care. The median weekly cost for child care services is the amount which divided the dollar distribution of the costs into two equal groups, one having expenses above the median, and the other having expenses below the median.

Time lost from work. This refers to the time lost from work by the respondent or the respondent's spouse in the reference month due to a failure in obtaining child care arrangements.

Employment status. Persons in the child care supplement were classified as being employed in the month preceding the interview if they either (a) worked as paid employees or worked in their own business or profession or on their own farm or worked without pay in a family business or farm, or (b) were temporarily absent from work either with or without pay.

Full time and part time. The data on full- and part-time workers pertain to the number of hours a person usually works per week from all jobs, either as an employee or in his own business or profession. Persons who report themselves as usually working 35 or more hours each week are classified as full-time workers, persons who report that they usually work fewer than 35 hours per week are classified as part-time workers.

Occupation. Data refer to the civilian job currently held at the time of the interview. If two or more jobs were held, the occupation shown in this report refer to the job in which the respondent worked the most hours.

Years of school completed. Data on years of school completed in this report are derived from the combination of answers to questions concerning the highest grade of school attended by the person and whether or not that grade was completed. The following categories used in this report are based on the number of years of school completed: not a high school graduate (less than 12 years); high school graduate (12 years), college, 1 to 3 years (13 through 15 years); and college, 4 or more years (16 or more years of school completed).

Symbols. A dash (-) represents zero or a number which rounds to zero, "B" means that the base is too small to show the derived measure (less than 200,000 persons).

Rounding of estimates. Individual numbers are rounded to the nearest thousand without being adjusted to group totals, which are independently rounded. Derived measures are based on unrounded numbers when possible, otherwise, they are based on the rounded numbers.



### Appendix C. Source and Reliability of Estimates

#### **SOURCE OF DATA**

The data were collected during the fifth wave of the 1984 panel of the Survey of Income and Program Participation (SIPP). The SIPP universe is the noninstitutionalized resident population of persons living in the United States. However, this report excludes information collected from the farm population and persons living in group quarters.

The 1984 panel SIPP sample is located in 174 areas comprising 450 counties (including one partial county) and independent cities. Within these areas, the bulk of the sample consisted of clusters of 2 to 4 living quarters (LQs), systematically selected from lists of addresses prepared for the 1970 decennial census. The sample was updated to reflect new construction.

Approximately 26,000 living quarters were designated for the sample. For Wave 1, interviews were obtained from the occupants of about 19,900 of the designated living quarters. Most of the remaining 6,100 living quarters were found to be vacant, demolished, converted to nonresidential use, or otherwise ineligible for the survey. However, approximately 1,000 of the 6,100 living quarters were not interviewed because the occupants refused to be interviewed, could not be found at home, were temporarily absent, or were otherwise unavailable. Thus, occupants of about 95 percent of all eligible living quarters participated in Wave 1 of the survey.

For the subsequent waves, only original sample persons (those interviewed in the first wave) and persons living with them were eligible to be interviewed. With certain restrictions, original sample persons were to be followed even if they moved to a new address. All noninterviewed households from Wave 1 were automatically designated as noninterviews for all subsequent waves. When original sample persons moved without leaving forwarding addresses or moved to extremely remote parts of the country, additional noninterviews resulted.

Noninterviews. Tabulations in this report were drawn from interviews conducted from January through April 1985. Table C 1 summarizes information on nonresponse for the interview months in which the data used to produce this report were collected.

Table C-1. Sample Size by Month and Interview Status

Month	Eligible	Interviewed	Non- interviewed	Non- response rate (%)
January '85	5,600	4,700	900	16*
February '85	5,600	4,700	1,000	17
March '85**	4,600	3,800	800	18
April '85	4,700	3,800	900	18

\*Due to rounding of all numbers at 100, there are some inconsistencies. The percentage was calculated using unrounded numbers.

\*\*Starting in March 1985, a sample cut was implemented for budgetary reasons.

Some respondents do not respond to some of the questions. Therefore, the nonresponse rate for some items such as child care arrangements may differ from item to item. (See appendix D.)

Estimation. The estimation procedure used to derive SIPP person weights involved several stages of weight adjustments. In the first wave, each person received a base weight equal to the inverse of his/her probability of selection. For each subsequent interview, each person received a base weight that accounted for following movers.

A noninterview adjustment factor was applied to the weight of every occupant of interviewed households to account for households which were eligible for the sample but were not interviewed. (Individual nonresponse within partially interviewed households was treated with imputation. No special adjustment was made for noninterviews in group quarters.) A factor was applied to each interviewed person's weight to account for the SIPP sample areas not having the same population distribution as the strata from which they were selected.

An additional stage of adjustment to persons' weights was performed to bring the sample estimates into agreement with independent monthly estimates of the civilian (and some military) noninstitutional population of the United States by age, race, and sex. These independent estimates were based on statistics from the 1980 Census of Population; statistics on births, deaths, immigration, and emigration; and statistics on the strength of the Armed Forces. To increase accuracy, weights were further adjusted in such a manner that SIPP sample estimates would closely agree with special Current Population Survey 'CPS') estimates by type of householder (married, single with relatives or single without relatives by

<sup>&#</sup>x27;The noninstitutionalized resident population includes persons living in group quarter, such as dormitories, rooming houses, and religious group dwellings. Crew members of merchant vessels, Armed Forces personnel living in military barracks, and institutionalized persons, such as correctional facility inmates and nursing home residents, were not eligible to be in the survey. Also, United States citizens residing abroad were not eligible to be in the survey. With these qualifications, persons who were at least 15 years of age at the time of in-

sex and race) and relationship to householder (spouse or other).<sup>2</sup> The estimation procedure for the cata in the report also involved an adjustment so that the nusband and wife of a household received the same weight.

#### **RELIABILITY OF THE ESTIMATES**

SIPP estimates in this report are based on a sample; they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same questionnaire, instructions, and enumerators. There are two types of errors possible in an estimate based on a sample survey: nonsampling and sampling. The magnitude of SIPP sampling error can be estimated, but this is not true of nonsampling error. Found below are descriptions of sources of SIPP nonsampling error, followed by a discussion of sampling error, its estimation, and its use in data analysis.

Nonsampling variability. Nonsampling errors can be attributed to many sources, e.g., inability to obtain information about all cases in the sample, definitional difficulties, differences in the interpretation of questions, inability or unwillingness on the part of the respondents to provide correct information, inability to recall information, errors made in collection such as in recording or coding the data, errors made in processing the data, errors made in estimating values for missing data, biases resulting from the differing recall periods caused by the rotation pattern and failure to represent all units within the universe (undercoverage). Quality control and edit procedures were used to reduce errors made by respondents, coders and interviewers.

Undercoverage in SIPP results from missed living quarters and missed persons within sample households. It is known that undercoverage varies with age, race, and sex. Generally, undercoverage is larger for males than for females and larger for Blacks than for non-Blacks. Ratio estimation to independent age-race-sex population controls partially corrects for the bias due to survey undercoverage. However, biases exist in the estimates to the extent that persons in missed households or missed persons in interviewed households have afferent characteristics than the interviewed persons in the same age-race-sex group. Further, the independent population controls used have not been adjusted for undercoverage in the decennial census.

The Bureau has used complex techniques to adjust the weights for nonresponse, but the success of these techniques in avoiding bias is unknown.

A bias may also occur in estimates related to unsupervised children. An example of such an estimate is total number of unsupervised children. The following causes for bias are suggested.

 The complexity of the questions and concepts used to identify unsupervised children may have led to confusion among respondents.

<sup>2</sup>These special CPS estimates are slightly different from the published monthly CPS estimates. The differences arise from forcing counts husbands to agree with counts of wives.

- 2. In some jurisdictions the parents of children found to be "u..supervised" could be charged with the crime of "child neglect."
- 3. Respondents may fear they are placing a child in jeopardy by disclosing that the child is alone or unsupervised.
- 4. It may be more socially desirable to report that a child is supervised than that the child is not supervised.

The misreporting of any specific child care arrangement may affect the overall distribution of child care arrangements shown in this report. For example, an underestimate in the proportion of children being left without adult supervision would result in overestimates for one or more of the other child care arrangements.

Comparability with other statistics. Caution should be exercised when comparing data from this report with data from earlier SIPP publications or with data from other surveys. The comparability problems are caused by sources such as the seasonal patterns for many characteristics and different non-sampling errors.

Sampling variability. Standard errors indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The standard errors for the most part measure the variations that occurred by chance because a sample rather than the entire population was surveyed.

The sample estimate and its standard error enable one to construct confidence intervals, ranges that would include the average result of all possible samples with a known probability. For example, if all possible samples were selected, each of these being surveyed under essentially the same conditions and using the same sample design, and if an estimate and its standard error were calculated from each sample, then:

- Approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average result of all possible samples.
- 2 Approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result of all possible samples.
- Approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average result of all possible samples.

The average estimate derived from all possible samples is or is not contained in any particular computed interval. However, for a particular sample, one can say with a specified

confidence that the average estimate derived from all possible samples is included in the confidence interval.

Standard errors may also be used for hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The most common types of hypotheses tested are 1) the population parameters are identical versus 2) they are different. Tests may be performed at various levels of significance, where a level of significance is the probability of concluding that the parameters are different when, in fact, they are identical.

All statements of comparison in the report have passed a hypothesis test at the 0.10 level of significance or better, and most have passed a hypothesis test at the 0.05 level of significance or better. This means that, for most differences cited in the report, the estimated absolute difference between parameters is greater than twice the standard error of the difference. If other differences have been mentioned, the estimated absolute difference between parameters is between 1.6 and 2.0 times the standard error of the difference. In such a case, the statement of comparison is qualified in some way (e.g., by use of the phrase "some evidence").

Note when using small estimates. Summary measures (such as medians and percent distribut ons) are shown in the report only when the base is 200,000 or greater. Because of the large standard errors involved, there is little chance that summary measures would reveal useful information when computed on a smaller base. Estimated numbers are shown, however, even though the relative standard errors of these numbers are larger than those for the corresponding percentages. These smaller estimates are provided primarily to permit such combinations of the categories as serve each user's needs. Also, care must be taken in the interpretation of small differences. For instance, in case of a borderline difference, even a small amount of nonsampling error can lead to a wrong decision about the hypotheses, thus distorting a seemingly valid hypothesis test.

Standard error parameters and tables and their use. To derive standard errors that would be applicable to a wide variety of statistics and could be prepared at a moderate cost, a number of approximations were required. Most of the SIPP statistics have greater variance than those obtained through a simple random sample of the same size because clusters of living quarters are sampled for SIPP. Two parameters (denoted "a" and "b") were developed to calculate variances for each type of characteristic.

The "a" and "b" parameters vary by subgroup. Table C-4 provides "a" and "b" parameters for characteristics of interest in this report. The "a" and "b" parameters may be used to directly calculate the standard error for estimated numbers and percentages. Because the actual variance behavior was not identical for all statistics within a group, the standard errors computed from parameters provide an indication of the order of magnitude of the standard error for specific statistic.

For those users who wish further simplification, we have also provided general standard errors in tables C-2 and C-3. Note that these stan dard errors must be adjusted by an "f" factor from table C-4. The standard errors resulting from this simplified approach are less accu rate. Methods for using these parameters and tables for computation of standard errors are given in the following sections.

Standard errors of estimated numbers. The approximate standard error,  $S_{\chi}$ , of an estimated number of persons shown in this report can be obtained in two ways. (Note that neither method should be applied to dollar values.)

It may be obtained by use of the formula

$$S_x = fs$$
 (1)

where f is the appropriate "f" factor from table C-4, and s is the standard error on the estimate obtained by interpolation from table C-2. Alternatively, Sx may be approximated by the formula

$$S_{x} = \sqrt{ax^{2} + bx}$$
 (2)

from whigh the standard errors in table C-2 were calculated. Use of this formula will provide more accurate results than the use of formula 1 above. Here x is the size of the estimate and "a" and "b" are the parameters associated with the particular type of characteristic being estimated.

Illustration. SIPP estimates from text table G of this report show that 550,000 women with one child between 3 and 4 years old paid cash for child care arrangements. The appropriate "a" and "b" parameters and "f" factor from table C-4 and the appropriate general standard error from table C-2 are

$$a = -.0000669$$
,  $b = 5,980$ ,  $f = 0.52$ ,  $s = 108,000$ 

Using formula 1, the approximate standard error is

$$S_x = 0.52 \times 108,000 \approx 56,000$$

Table C-2. Standard Errors of Estimated Numbers of Persons

(Numbers in thousands)

Size of estimate	Standard error	Size of estimate	Standard error
200	66	50,000	923
600	81 114	80,000 100,000	1,066 1,110
1,000	147	130,000	1,111
2,000	208	135,000	1,103
5,000	326	150,000	1,068
8,000	410	160,000	1,032
11,000	477	180,000	927
13,000	516	200,000	760
15,000	552	210,000	639
17,000		220,000	469
22,000			
26,000			
30,000	753		

Table C-3. Standard Errors of Estimated Percentages of Persons

Base of estimated percentage	Estimated percentage						
(thousands)	1 or 99	2 or 98	5 or 95	10 or 90	25 or 75	50	
200	3 3	4.6	7.2	9.9	14 3	16 5	
300	2 7	3.8	5 9	8 1	11.7	13.5	
600	1.9	2.7	4.1	5.7	8 2	9.5	
1,000	1.5	2 1	3 2	4 4	6.4	7.4	
2,630	1 0	1 5	23	3 1	4.5	5.2	
5,000	0 7	0.9	1.4	2.0	2.9	3.3	
8,000	0.5	0.7	1,1	1.6	2.3	2.6	
11,000 .	0 4	0 6	1.0	1.3	1.9	2.2	
13,000	0 4	0.6	0.9	1 2	1.8	2.0	
17,000	0.36	0.5	0.8	1.1	1.5	1.8	
22,000	0.31	0.4	0.7	0.9	1.4	1.6	
26,000	0.29	0.4	0.6	0.9	1.3	1.4	
30,000	0 27	0.4	06	0.8	1,2	1,3	
50,000	0.21	0.3	0.5	0.6	0.9	1.0	
80,000	0 16	0 2	0.4	0.5	0.7	0.8	
100,000	0.15	0.2	0.3	0.4	0.6	0.7	
130,000	0.13	0 18	0.3	0.4	0.6	0.6	
220,000	0 10	0 14	0.2	0.3	0.0	0.5	

Using formula 2, the approximate standard error is

$$\sqrt{(-.0000669)(550,000)^2 + (5,980)(550,000)} \approx 57,000$$

The 95-percent confidence interval as shown by the data is from 436,000 to 664,000. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 95 percent of all samples.

Standard e rors of estimated percentages. The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends from both the size of the percentage and the size of the total upon which the percentage is based. When the numerator and denominator of the percentage have different parameters, use the parameter (and appropriate factor) of the numerator. If proportions are presented instead of percentages, note that the standard error of a proportion is equal to the quotient of the standard error of the corresponding percentage and 100.

For the percentage of persons, the approximate standard error, S(x,p), of the estimated percentage p can be obtained by the formula

$$S_{(p)} = fs (3)$$

In this formula, f is the "propriate" f" factor from table C-4 and s is the standard error on the estimate from table C-3. Alternatively, it may be approximated by the formula

$$S_{(x,p)} = \sqrt{(b/x) (p) (100-p)}$$
 (4)

from which the standard errors in table C-3 were calculated. Use of this formula will give more accurate results than use of formula 3 above. Here x is the size of the subclass of persons which is the base of the percentage, p is the percentage.

tage (O<p<100), and b is the parameter associated with the characteristic in the numerator.

Illustration. Text table G shows that an estimated 23.8% of women v..th a single child between 3 and 4 years old who paid cash for child care arrangements paid at least \$50.00 per week. Using formula 3 with the "f" factor from table C-4 and the appropriate standard error from table C-3, the appropriate standard error is

$$S_{(x,p)} = 0.52 \times 8.6\% = 4.5\%$$

Using formula 4 with the "b" parameter from table C-4, the approximate standard error is

$$S_{(x,p)} = \sqrt{\frac{5,980}{550,000}} 23.8\%(100\%-23.8\%) = 4.4\%$$

Consequently, the 95-percent confidence interval as shown by these data is from 15.0 to 32.6 percent.

Standard error of a difference within this report. The standard error of a difference between two sample estimates is approximately equal to

$$S_{(X-Y)} = \sqrt{S_X^2 + S_Y^2}$$
 (5)

where  $\mathbf{S}_{\mathbf{X}}$  and  $\mathbf{S}_{\mathbf{y}}$  are the standard errors of the estimates  $\mathbf{x}$  and  $\mathbf{y}.$ 

The estimates can be numbers, percents, ratios, etc. The above formula assumes that the sample correlation coefficient, r, between the two estimates is zero. If r is really positive (negative), then this assumption will lead to overestimates (underestimates) of the true standard error.

Illustration. Agair, using text table G, 32.1% of single child women who were employed full time and paid cash for child care arrangements paid at least \$50.00 per week and 9.3% of those who worked part time paid at least \$50.00 per week. The standard errors for these percentages are computed using formula 4, to be 3.1% and 3.7%. Assuming that these two estimates are not correlated, the standard error of the estimated difference of 22.7 percentage points is

$$S_{(X-Y)} = (3.1\%)^2 + (3.7\%)^2 = 4.8\%$$

The 95-percent confidence interval is from 13.1 to 32.3 percentage points. Since this interval does not contain zero, we conclude that the difference is significant at the 5-percent level.

Standard error of a median. The median quantity of some item such as income for a given group of persons is that quantity such that at least half the group have as much or more and at least half the group have as much or less. The sampling variability of an estimated median depends upon the form of the distribution of the item as well as the size of the group. Standard errors on medians may be calculated by the procedure described below.

An approximate method for measuring the reliability of an estimated median is to determine a confidence interval about it. (See the section on sampling variability for a general discussion of confidence intervals.) The following procedure may

be used to estimate the 68-percent confidence limits and hence the standard error of a median based on sample data.

- 1. Determine, using either formula 3 or formula 4, the standard error of an estimate of 50 percent of the group;
- 2. Add to and subtract from 50 percent the standard arror determined in step 1;
- 3. Using the distribution of the item within the group, calculate the quantity of the item such that the percent of the group owning more is equal to the smaller percentage found in step 2. This quantity will be the upper limit for the 68-percent confidence interval. In a similar fashion, calculate the quantity of the item such that the percent of the group owning more is equal to the larger percentage found in step 2. This quantity will be the lower limit for the 68-percent confidence interval;
- 4. Divide the difference between the . ") quantities determined in step 3 by two to obtain the s:andard error of the median.

To perform step 3, it will be necessary to interpolate. Different methods of interpolation may be used. The most common are simple linear interpolation and Pareto interpolation. The appropriateness of the method depends on the form of the distribution around the median. If density is declining in

Table C-4. SIPP Generalized Variance Parameters

Characteristic	a	b	f-tactor
Total or White			
16 + program participation and benefits (3): Both sexes	-0.0001030	17,539	0.90
	-0.0002167	17,539	0.50
	-0.0001962	17,539	9.90
18 + welfare history and AFDC: Both sexes (2) Male Fernale	-0.0001026	17,539	0.90
	-0.0002162	17,539	0.90
	-0.0001952	17,539	0.90
16+ income and labor force¹ (4): Both sexes Male Female	-0.0000351	5,980	0.52
	-0.0000739	5,980	0.52
	-0.000669	5,980	0.52
0-15 child care (5)	-0.0001155	5,980	0.52
All others² (6):  Both sexes  Male  Female	-0 (/000943	21,746	1 00
	-0.0001951	21,746	1.00
	-0.0001827	21,746	1.00
Black (1)		27,7	.,00
Both sexes Male Female	-0.0C02916	8,045	0.61
	-0.0006266	8,045	0.61
	-0.0005453	8,045	0.61

<sup>&</sup>lt;sup>1</sup>Also use these parameters for tabulations of women by loss of work time from failure of child care arrangements and by cash payments made for child care.

<sup>2</sup>These parameters are to be used for all tabulations not specifically covered by any other category in this table.

te: For cross tabulations for persons apply the paramenters of the category showing the smaller number in pare.. heses.

the area, then we recommend Pareto interpolation. If density is fairly constant in the area, then we recommend linear interpolation. Note, however, that Pareto interpolation can never be used if the interval contains zero or negative measures of the item of interest. Interpolation is used as follows. The quantity of the item such that "p" percent own more is

Pareto: 
$$X_{pN} = \exp \left[ \frac{\ln (p_N/N_1)}{\ln (N_2/N_1)} \right] \ln (A_2/A_1) \cdot A_1$$
 (6)

if Pareto Interpolation is indicated and

Linear: 
$$x_{pN} = \frac{pN - N_1}{N_2 - N_1} (A_2 - A_1) + A_1$$
 (7)

if linear interpolation is indicated, where N is the size of the group,

A1 and A2 are the lower and upper bounds, respectively, of the interval in which XpN falls,

N1 and N2 are the estimated number of group members owning more than A1 and A2, respectively,

exp refers to the exponential function and

Ln refers to the natural logarithm function.

Illustration. Again using text table G, the median weekly cash payment by employed mothers with one hild less than 1 year old was \$41.1. The size of this group was 263,000.

- 1. Using formula 4, the standard error of 50 percent on a base of 263,000 is about 7.5 percentage points.
- Following step (2), the two percentages of interest are 42.5 and 57.5.
- 3. By examining text table G, we see that the percentage 42.5 falls in the interval from \$40 to \$49. (Since 51.8% pay more than \$40 per month, but only 35.4% pay more than \$50 per month, the quantity that exactly 42.5% pay

more than must be between \$40 and \$49.) Thus  $A_1 = $40, A_2 = $49, N_1 = 136,000$ , and  $N_2 = 93,000$ . In this case, we decided to use Pareto interpolation.

Therefore, the upper bound of a 68 confidence interval for the median is

$$\exp \left[ \left( \ln \frac{(.425) (263,000)}{136,000} \right) \ln \frac{93,000}{136,000} \right) \ln \frac{49}{40} \right] (40)$$

Also by examining text table G, we see that the percentage of 57.5 falls in the interval from \$30 to \$39. Thus,  $A_1 = $30$ ,  $A_2 = $39$ ,  $N_1 = 192,000$ , and  $N_2 = 136,000$ . We also decided to use Pareto interpolation for this case. So the lower bound of a 68/confidence interval for the median is

$$\exp\left[\left(\ln\frac{(.575)(263,000)}{192,000}\right) \ln\frac{136,000}{192,000}\right) \ln\frac{39}{30}\right] (30)$$
= \$36.0

Thus, the 68-percent confidence interval on the estimated median is from \$36.0 to \$44.4. An approximate standard error is

Standard arrors of ratios of medians. The standard error for a :atio of medians is approximated by:

$$S_{X/Y} = \sqrt{\left(\frac{x}{Y}\right)^2 \left[\left(\frac{S_Y}{Y}\right)^2 + \left(\frac{S_X}{X}\right)^2}$$
(8)

where x and y are the medians, and sx and sy are their associated standard errors. Formula 8 assumes that the medians are no correlated. If the correlation between the two medians is actually positive (negative), then this procedure will provide an overestimate (underestimate) of the standard error for the ratio of medians.



#### Appendix D. Data Quality

Two principal determinants of the quality of data collected in household surveys are the magnitude of the imputed responses and the accuracy of the responses that are provided. This appendix provides information on the imputation rates for selected child care items in the Survey of Income and Program Participation and covers some of the problems encountered in collecting data on child care expenses from the respondents in the survey.

imputed responses refer either to missing responses for specific questions or "items" in the questionnaire or to responses that were rejected in the editing procedure because of improbable or inconsistant responses. An example of the latter is when a 14 year old child is said to be cared for in a nursery school during the time his parent is at work.

The estimates shown in this report are produced after all items have been edited and imputed whenever necessary. Missing or inconsistent responses to specific questions are assigned a value in the imputation phase of the data processing operation. The procedure used to assic or impute most responses for missing or inconsistent data for SIPP is commonly referred to as tine "hot deck" imputation method. This process assigns item values reported in the survey by respondents to nonrespondents. The respondent from whom the value is taken is called the "donor." Values from donors are assigned by controlling for demographic and labor force data available for both donors and nonrespondents. The control variables used for child care items generally included the age of the child for whom there was missing data, the parent's marital status and whether the parent was employed part time or full time.

Imputation rates for both primary and secondary child care arrangements (items 1a and 1e in the questionnaire shown in Appendix E) for the respondents' three youngest children are shown in table D-1. The imputation rates are calculated by dividing the number of missing or inconsistent responses by the total number of responses that should have been provided based on the number of children in the household who required child care responses. In general, the level of imputation for child care arrangements in SIPP was about 5 percent, a level comparable to those reported in prior Census Bureau child care surveys.

Table D 2 shows imputation rates for items concerning time lost from work due to failures in child care arrangements and cash payments made for child care arrangements. Of the 1,586 respondents who were to answer the item if they or

Table D-1. Imputation Rates for Items on Primary and Secondary Child Care Arrangements

(For the three youngest children under 15 years old)

Arrangement and order of child	Unweighted number of children	Percent of responses imputed
Primary arrangement: First child	3,462 1,703 438	5.3 4.7 5.0
Secondary arrangement: First child	846 498 123	3.7 2.8 5.7

their spouse lost any time from work during the last month, 7.5 percent had their response imputed. Another 7.6 percent failed to answer the question if any cash payment was made for child care services, but for those women who were determined to have made a cash payment, only 2.1 percent failed to report on the amount of the payment.

An evaluation of the quality of the responses on SIPP is limited because of the general lack of data sets on child care at the national level. Wherever appropriate in the text of this report, comparisons have been made with data sources to evaluate the distribution of child care arrangements of preschoolers, the amount and frequency of cash payments made by families, time lost from work due to failures in child care arrangements, and estimates of unmarried males living with their children.

Table D-2. Imputation Rates for Time Lost From Work Because of Failures in Arrangements and for Cash Payments Made for Arrangements

Item	Unweighted number of respondents	Percent of responses imputed
Time lost from work¹	1,586 . ,586 . 1,044	7.5 7.6 2.2

<sup>&#</sup>x27;Limited to respondents who for any of their three youngest children, one or more of the following primary or secondary child care arrangements were used, grandparent, other relative of child (excluding family members), nonrelative of child, day, group care center, nursery school or preschool.

<sup>2</sup>Limited to respondents who were determined to have made a cash payment for child care arrangements.



Estimates of weekly child care payments presented spec.al data collection problems. The data in SIPP represent the total child care expenses for all children in the household who were cared for by grandparents, other non-family relatives, nonrelatives, group/day care centers, nursery schools or preschools. Because of the above collection procedures, cost estimates for specific child care arrangements can only be accertained if there was only one child in the household and if that child used only one type of arrangement. This procedure, however analytically limiting, was chosen because it became apparent when this questionnaire was pretested that the desired detail could not effectively be given by the respondents.

Unlike many other services purchased by individuals, the scope of duties and hours of child care services are not uniformly defined across households. Several types of

problems were encountered by the respondents. One such problem was that respondents often nired child care providers to work in their home who also performed other duties such as household cleaning, cooking, and marketing as part of their total cash payment. Thus, the respondent could not determine the actual cost incurred by the child care component out of the total cash payment.

Another typical problem arose when the respondent made a single cash paymemnt to a caretaker who provided child care services for more than one child in a household. Often, it was not possible for a respondent to prorate the costs per child as child care providers may spend different amounts of time looking after children of different ages. Thus, it would be incorrect to assume that child care costs for two children in different age groups would be the same.



# Appendix E. Facsimile of SIPP Child Care Questionnaire



	Section 5 —	TOPICAL MODULES	3
	Part	A - CHILD CARE	
	s the designated parent or guardi of children under 15 years of age who we in this household?		ck Item T5
TEM T2	"Worked" marked on the ISS for .	7   8002   1   Yes 2   No - SKIP to Che	ck Item T5
CHECK ITEM T3	YOUNGEST	SECOND YOUNGEST	THIRO YOUNGEST
Enter names, againd person numbers of children under 1 beginning with till youngest	Person No	Person No 8006 Name	Person No 8008
Ask 1a-1f for youngest child and then repeat for second and third youngest child.	Age	Age	Age
18. Now we ha a few questions about how the childrer are cared fo while works.  During (Las month) wha was (Name child) usuall doing or ho was (Name child) usuall cared for di ing most of the hours tf worked  Mark the arrangement v-hich the ch spent the mo hours in a typical week Mark (X) only one box	parent/stepparent    Child's brother/   Sister 15+   Child's brother/sister     Under 15     Child's grandparent   Child's grandparent   Child's grandparent   Child in     Child in     Child in     Child in     Child in     Child in     SKIP     Child ares for     Self     Child avork   Child avork   Child at work    Child on     Child an     Child cares for     Child an     Child an     Child on     Chil	Child's other parent/stepparent	1 Child's other parent/stepparent Child's brother/sister under 15 Child's brother/sister under 15 Child's grandparent Child's grandparent Child grandparent Child in day/group care center Child in kindergarten, elementary or secondary school Child cares for self  Child cares for child cares for child at work  Child not born as of Check Itern last month  SKIP to born as of Check Itern last month  T5
D. Where was (Name of chr usually care for under thi arrangemen	d 2 Other private home	SO18  1 Child's home  2 Other private home  3 Other place - Specify	So20  1 Child's home  2 Other private home  3 Other place — Specify
C. Was (Name of child) usuall cared for the way during all of the hours that. workad?	is next child or Check Item T4	1 Yes - SKIP to next child or Check Item T4 2 No	1□ Yes — SKIP to Check Item T4
d. About how many hours per week w (Name of chi usually care for under the arrangemen while w et work?	d 8028 Hours	8030 Hours	HOURS  FORM SIPP 4500 (7.17.84)



What did (Name of child) do or		t A — CHIL	D CARE (Continu	ad)		
(Name of						_
	YOUNGEST		SECOND YOUN	GEST	THIRD YOUNGE	ST
	8034. 1 ☐ Child's other	80	Child's other		8038 Child's other	
how was (Name of	parent/		parent/		parent/	
child) cared	stepparent 2 Child's brother/		stepparent 2 Child's brothe	1	stepparent	
for during	sister 15 +		sister 15 +	<b>:</b> #1	2 Child's brother	
	3 ☐ Child's	•	3□ Child's		3□ Child's	
that					brother/	
worked?	15		15			
Mark the	4 ☐ Child's		4□ Child's		4 Child's	
arrangement in	c 🗆 Otto olot o		grandparent		grandparent	
which the child						
	6 ☐ Nonrelative		6 Nonrelative			
hours in a	of child		_ of child		of child	
typical week.				)	7☐ Child in	1
Mark (X) only						}
one box.	8 Child in				8 Child in	
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!	o □ Childin	İ	<u> </u>			
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I I	elementary or		elementary or		elementary or	SKIP to Check
J	secondary	Check	secondary	Check	secondary	Item T4
ĺ		tem T4		Item T4		
1	for self		for self		for self	
1	11 works		11 works	1	11 works	
ļ		ļ	at home		at home	
1						
1	at work		at work	J	at work	
Where was	8040	804	12		8044 [	
(Name of child)	1 Child's home		1□ Child's home		Child's home	
usually cared	2 Other private home	e	2 Other private h	nme	Other orwate no	mo
	_	-				
arrangement?	3 Uther place - Spe	CITY	3LJ Other place -	Specify	3. J Other place − S	pecify
j				•		-
i						
CK Are an	of the shildess as and fac		8046		<u> </u>	
"Grand	parent," "Other relative	of child,"				
"Nonre	lative of child," "Day/Gr	oup Care		_	Check Item T5	
4, 5, 6,	7, or 8 marked in 1a or 1	e) (Codes		) O(() (0	Check tem 15	
			8048			
of the child car	a that 's children rec	eived?	, nv	ı e		
nclude cost of p	reschool and nursery sch	ool, e clude	2 No		2c	
cost of kinderga	rten, elementary or secon	idary school.	.	Ontil to		
n a typical wer	k, how much did (or	's family	8050			
pay for child ca	re (for all children recei	ving child	! 1			
:are) r			\$		00 Per week	
			8052			
:hild care throu	sn payment; bid pa: iGh a noncash arrangan	y for any nant such		• 5		
s providing ro	om and board or exchar	iging child				
		<del></del>	1054			
on and guing the mon	th of (last month) did v time from work becau	. (or's				
on who usually	y took care of the child (	(children)	1			
vas not availab	<u>-ile?</u>		1	•		
6						
	Where was Name of child care through the child spent the second most hours in a typical week.  Mark (X) only one box.  Where was Name of child) usually cared for under this other arrangement?  CK Are any "Grand" Nonre center, 4, 5, 6, old (or 's of the child care through the child care through the care the care of prost of kindergal na typical weeks any for child care through the care t	most of the other hours that survived?  Mark the arrangement in which the child spent the second most hours in a typical week.  Mark (X) only one box.  Mark (X) only one care center on elementary or secondary school one box.  Mark (X) only one care center on elementary or secondary school one box.  Mark (X) only one care determined box.  Mark (X) only one care of the child should box.  Mark (X) only one care of the child should box.  Mark (X) only one care of the child should box.  Mark (X) only one care of the child should box.  Mark (X) only one care of the child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child should box.  Mark (X) only one care center of child will box one of child should box on	worked?  Mark the arrangement in spent the second most hours in a typical week.  Mark (X) only one box.  Mark (X) only one care enter on box.  Mark (X) only of child in day/group care on box.  Mark (X) only one box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only of child in day/group care on box.  Mark (X) only on care center on box.  Mark (X) only on care center on box.  Mark (X) only on care center on box.  Mark (X) on	worked?    Steam of the very worked?   Steam of the very worked?   Steam of the very worked?   Steam of the very worked?   Steam of the very worked?   Steam of the very worked?   Steam of the very worked?   Steam of the very worked?   Steam of the very work of	when the was Name of child/s brother or secondary school of child are so for self or s	where we was Name of child at work at home was leaved or child at

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